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November 30, 1992

VIA HAND DELIVERY

Mr. David Novak
Community Relations Coordinator
Office of Public Affairs, PS-19 J
USEPA Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: Himco Superfund Site

Dear Mr. Novak:

Enclosed are three copies of Miles' comments on U.S. EPA's RI/FS and Proposed Plan at the Himco Superfund Site. Please stamp the documents as received on today's date. Also, please forward copies to Tom Nash and Mary Elaine Gustafson.

Please call me if you have any questions.

Very truly yours,

Reed S. Oslan

Enclosure

cc: Richard W. Winchell, Esq.

COMMENTS ON U.S. EPA'S PROPOSED PLAN AT THE HIMCO SUPERFUND SITE

SUBMITTED ON BEHALF OF MILES INC.

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I. EXECUTIVE SUMMARY

U.S. EPA has concluded there is no unacceptable risk at the Himco Superfund Site, but at the same time proposes a $12 million remedy. The entire remedy is directed at a "hypothetical" future risk involving groundwater consumption. In fact, the former landfill is already capped and there is no unacceptable present or future groundwater risk at Himco. U.S. EPA's exposure scenarios are unreasonable, and its Risk Assessment is based on an incorrect and flawed analysis. Because there is no unacceptable risk at the property, no site remediation is necessary to protect human health and the environment. "No Action" is the most appropriate remedial alternative. U.S. EPA's failure to recognize that Himco should not be a Superfund site has resulted in an arbitrary and capricious remedy proposal. Miles respectfully requests U.S. EPA to reconsider its proposal, to select a "No Action" alternative with limited institutional controls, and to recommend that the site be deleted from the NPL.

II. INTRODUCTION

Miles Inc. ("Miles") submits these Comments to U.S. EPA to demonstrate that the proposed remedial action at the Himco Superfund Site ("Himco") is improper and unenforceable. U.S. EPA extended the comment period to November 30, 1992 (see Letter attached as Exhibit A), and these Comments are timely filed within U.S. EPA's extended deadline. Miles hereby requests U.S.

EPA to reconsider its proposal, given that the public is not served by implementation of an improper remedial action.

U.S. EPA repeatedly admits there is no present on-site risk at Himco, no present off-site risk at Himco, and no future off-site risk at Himco. U.S. EPA's entire remedial action is premised on a hypothetical future risk for hypothetical residents and workers who consume the hypothetical contaminated groundwater underneath the landfill. Even then, U.S. EPA admits that nearly all of its hypothetical future risk is attributable to substances that were either not detected in the groundwater or otherwise are attributable to background or upgradient sources. Moreover, U.S. EPA concedes "[i]t is extremely unlikely that construction of a house or commercial plant would occur [on site]." Baseline Risk Assessment at 3-20.

U.S. EPA has concluded there is "no unacceptable risk to human health or the environment" at Himco. It nevertheless proposes an extensive $12 million remedy. U.S. EPA's proposal is based on a flawed Risk Assessment and a failure by U.S. EPA to properly evaluate remedial options for the property. The proposed remedy is excessive, inconsistent with the National Contingency Plan, and arbitrary and capricious.

A review of U.S. EPA's remedial action objectives indicate that it primarily is concerned with: (1) preventing people from drinking the groundwater underneath the landfill; and, (2) making sure the groundwater underneath the site "remains unimpacted." As to the first objective, U.S. EPA completely

fails to acknowledge that the Indiana State Board of Health restricted any future on-site construction or occupation in 1984 and that site conditions (with or without institutional controls) fully address this concern.

Regarding the second objective, U.S. EPA concedes the groundwater "remains unimpacted" some thirty-two years after operations began. Thus, there is no basis to conclude the groundwater will be "impacted" in the future. The reason, which U.S. EPA virtually ignores, is that over two-thirds of the material in the landfill is calcium sulfate, a highly impervious material which was generated in huge quantities by Miles' citric acid manufacturing plant. The landfill operators literally encapsulated the waste materials between repeated layers of calcium sulfate, and ultimately covered the entire landfill with a four-foot cover of calcium sulfate and soil pursuant to a state consent decree.

If U.S. EPA is compelled to implement any remedy at Himco, limited institutional controls and monitoring would fully satisfy U.S. EPA's remedial objectives. U.S. EPA failed even to consider this alternative in its Feasibility Study.

A proper analysis of the data and circumstances at Himco reveal the site should never have been placed on the NPL. The predominant basis for NPL listing was an assumption of downgradient usage of contaminated groundwater. There is no downgradient ground water usage (all residences are connected to city water), there is no site-related groundwater contamination

and U.S. EPA has concluded that there is no future downgradient groundwater risk, even if the groundwater is used.

The following Comments demonstrate the numerous flaws in U.S. EPA's analysis and describe the legal deficiencies in U.S. EPA's proposal. Miles respectfully requests U.S. EPA to consider each comment, and to provide specific responses to each comment. Miles is hopeful that U.S. EPA will agree at most only institutional controls and groundwater monitoring are necessary to fully protect human health and the environment at Himco, and that these activities can be implemented outside the Superfund program.

III. BACKGROUND OF LANDFILL AND U.S. EPA ACTIVITY

The Himco Superfund site is a former municipal landfill located in Elkhart, Indiana. The landfill, covering approximately 50 acres, was operated from 1960 to 1976 by Charles Himes & Sons. See U.S. EPA Remedial Investigation Report ("RI") Volume I, at 1-3. Various commercial and industrial wastes were transported to the landfill by Himco Waste-Away Services, Inc. ("Himco"), a company also owned and operated by the Himes'. Hundreds of local businesses arranged for disposal of their wastes at Himco. Notably, Miles used the Himco landfill as a primary disposal site for millions of tons of calcium sulfate, a non-hazardous, highly impervious material. RI, at 1-3. U.S. EPA states that calcium sulfate is as impermeable as shale. FS, Appendix A, Technical Memorandum A2. Calcium sulfate was

disposed at a rate of approximately 320 cubic yards per day from 1960 to 1976 and comprises approximately two-thirds of the entire landfill volume. RI, at 1-3. When the landfill was closed, the operator covered the site with calcium sulfate and soil. See Affidavit of Mr. Jerry Perrin, attached as Exhibit B, at ¶ 7; RI, at 1-3.

During landfilling activities, the operators followed a systematic and repetitive procedure. See Exhibit B, Perrin Affidavit, at ¶ 4. As waste was dumped in the landfill, the operators compacted it with a bulldozer, then covered it with a layer of calcium sulfate. Next, the calcium sulfate layer was compacted to a thickness averaging 18 inches. Id. As each area was filled, the operators placed another layer of waste above the previous calcium sulfate layer, compacted it, and covered it with yet another compacted calcium sulfate layer. Through this process, Himco operators encapsulated and covered the waste in successive layers of calcium sulfate. This process was continued until the landfill was closed in October 1976. Id. at ¶¶ 5 and 6. U.S. EPA's investigation revealed the calcium sulfate was as thick as nine feet in some locations. RI, at 3-3.

A negotiated Consent Agreement between Himco and the Indiana State Board of Health ("ISBH") required a "cap" in the closure requirement for the landfill. See February 10, 1975 Consent Agreement, attached as Exhibit C. The ISBH requirements included "not less than one (1) foot of impermeable soil shall be applied as final cover over the calcium sulfate deposit." Id.

Himco installed approximately a three-foot cover over the entire landfill consisting of calcium sulfate covered with a layer of soil, and then seeded it. See Exhibit B, at ¶¶ 6 and 7 and 1988 Himco Comments at Tab 4, attached as Exhibit D.

The State of Indiana and U.S. EPA uniformly agree that the property should not and will not be used for the construction of any buildings. In August 1984, the ISBH advised the Elkhart Department of Health to prohibit the future construction of any buildings on the property. See August and September 1984 Letters, attached as Exhibit E. Among other things, ISBH stated "we still strongly recommend that this site not be used for construction of buildings of any type." Id. U.S. EPA also recognizes that residences or commercial buildings will not be constructed at the property:

> It is extremely unlikely that construction of a house or commercial plant would occur on the waste mass (landfilled) areas of the site due to structural and economic reasons.

Baseline Risk Assessment ("RA") Report (RI, Vol. 5), at 3-20.

The Himco landfill currently is not used for any residential, industrial, commercial, agricultural or other use.[1] It is covered with trees, brush, prairie grass and other native vegetation, resembling prairie conditions as other areas in Indiana. See RI (Vol. 5), at A1-3 ("Plant Community

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[1] U.S. EPA claims trespassers use the property for recreational purposes, i.e., bike riding, etc. Not only does U.S. EPA fail to properly consider these limited exposures, its conclusions regarding risks to these trespassers are incorrect. See Comments § V.A.3-5, infra.

Assessment").[2] The majority of the landfill property is zoned agricultural or manufacturing, and part of the site is fenced. The groundwater at or near the site is not used. The City of Elkhart currently provides all water through municipal wells, and has done so since 1990. Also, installing groundwater wells at the landfill is prohibited by Indiana law.

In 1986, U.S. EPA scored the landfill for potential listing on the NPL pursuant to its Hazard Ranking System ("HRS"). U.S. EPA calculated an HRS score of 42.31. This score was highly influenced by the proximity of residential wells south of the landfill and the assumption of groundwater contamination off site.[3] In 1988, the property was proposed for the NPL. The proposed NPL listing was challenged by Himco primarily because there was simply no evidence that any threat existed. Despite Himco's challenge, the property was designated a Superfund site in February 1990.

IV. U.S. EPA'S REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

U.S. EPA initiated its Remedial Investigation at Himco in September 1989, five months before the site was placed on the NPL. The RI was performed by SEC Donohue and its subcontractors.

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[2] U.S. EPA gave the site a Natural Area Rating Index of 43, which qualifies the site as a "profound" natural area based on the amount and diversity of plant life this former landfill supports. Id. at A1-3.

[3] Based on present conditions, the HRS score would be well below 28.5 because there is no groundwater contamination and nearby residents are served by municipal water.

U.S. EPA sought to determine whether any site-related contamination posed a risk to human health or the environment.[4]

A. Risk Assessment

U.S. EPA's Risk Assessment unequivocally concludes:

1. There Is No Present Risk At Or Near The Landfill:

- "Conditions do not show unacceptable risk to human health and the environment." U.S. EPA Fact Sheet (Sept. 1992).
- "There appears to be no cause for concern for any current uses of the site." RI, at ES-4.
- "RI data do not indicate unacceptable [carcinogenic or noncarcinogenic] risk [i.e., risk greater than $1x10^{-4}$ or HI greater than 1] to the current population." RI, at 7-8.
- "It appears that although the landfill leachate is contaminated, this contamination has not impacted groundwater south of the landfill to a level of health and environmental concern." RI, at ES-5.
- "Very little contamination has been detected in groundwater sampled at the Himco site." RI, at 7-5.
- "Groundwater-sampling indicates minimum impact or no impact to groundwater outside of the landfill boundaries." RI, at 7-8.
- "No [Hazard Indices] for current populations exceed 1." RI, at 6-2.
- "[EPA] estimates place risks within an acceptable range as established by the NCP." FS, at ES-3.

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[4] During this investigation, residents south of the landfill were connected to the municipal water system. Also, in May 1992, U.S. EPA discovered several buried drums at the southwest border of the landfill. U.S. EPA removed seventy-one 55-gallon drums containing mainly toluene. No residual contamination was identified and no other drums were found at the property.

2. **There Is No Future Risk For Populations Off The Site Even If Groundwater Is Used:**

- "If a home or commercial establishment south of the landfill were to use groundwater in this area in the future, the estimated site-related risks associated with groundwater use are within acceptable risk ranges." RI, at ES-5.

3. **The Only Future Hypothetical Onsite Risk is From Ingestion of Groundwater:**

- "[F]uture land uses that do not involve use of groundwater, do not appear to pose a risk at a level of concern." RI, at ES-5.

4. **U.S. EPA's Risk Assessment Contractor Also Concedes No Risk Exists:**

- "Estimated cancer risks to current populations are summarized in Table 5-1. There is no reason for concern for carcinogenic effects via these pathways." RA, at 5-1.

- "All estimated noncarcinogenic risks for current populations are well below a level of concern." RA, at 5-8.

- "In this risk characterization, risk estimates have been calculated without regard to the source of the contamination. That is, all chemicals detected during the RI sampling were assumed to be site-related. There is some question as to whether some of the calculated risks could be attributable to background, either natural or relative to other source." RA, at 5-12, 14.

- "Arsenic and nitrate/nitrate dominate the noncarcinogenic risks. The source of the arsenic and beryllium appears to be natural; the source of the nitrate/nitrate is unknown but may be related to the previous agricultural use of the site." RA, at 5-14.

- "Virtually all this risk, however, is attributable either to chemicals not detected, but conservatively evaluated as if they were present, or to chemicals attributable to upgradient or background sources." RA, at 5-14.

- "[F]uture land uses which do not involve groundwater and current uses of the site do not present excess cancer risks greater than 1E-04 or hazard indices greater than 1E+00." RA, at 5-14.[5]

5. U.S. EPA's RPM Also Concedes That No Risk Exists Downgradient of the Landfill:

- "The groundwater downgradient of the site is not contaminated above levels of concern." See, e.g. October 6, 1992 Public Meeting Transcript, at 24, 44, 45, 46, and 49.

U.S. EPA concludes in the end that the only risk at Himco is a hypothetical future risk based on a hypothetical future use of the groundwater under the landfill presumed to be contaminated.[6]

B. Remedial Alternatives

U.S. EPA identifies four alternative remedies in its Feasibility Study, two of which are relevant here. The first is the "No Action" alternative. U.S. EPA rejects No Action virtually without explanation. In fact, as discussed in detail below, No Action is fully protective and is the appropriate remedy since site conditions pose no current risk, and U.S. EPA's own data reveal no potential future risk.

U.S. EPA's preferred remedy, the fourth alternative, includes a composite barrier cap over the entire landfill

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[5] The site presently supports unique and diverse prairie plant communities. Soil contaminants are not likely to have adverse effect on resident plant species. FS, at ES-3.

[6] U.S. EPA also improperly claims there is a risk to trespassers due to inhalation or consumption of contaminated soils or surface water. The U.S. EPA is incorrect as is demonstrated in these Comments.

consisting of four feet of clay and soil with a high density polyethylene liner. It also includes groundwater monitoring and institutional controls to restrict access and construction on the site, through fencing and deed restrictions, and a gas collection system. The present value of U.S. EPA's proposed remedy is almost $12 million. The entire remedy is directed at eliminating a non-existent risk to persons who literally move onto the landfill, drill a drinking well through the landfill, and drink the groundwater for decades.

V. U.S. EPA'S RISK ASSESSMENT IS FLAWED

U.S. EPA's Assessment is flawed, leading to gross mischaracterizations of the risks posed by the site. There are flawed procedures and erroneous assumptions in virtually every aspect of the Risk Assessment, including the exposure assessment, selection of chemicals of concern, the toxicity assessment, and the characterization of risks. There also are numerous inconsistencies between alternative sections of U.S. EPA's reports.

A. U.S. EPA Fails To Properly Assess Potential Exposure Pathways

1. U.S. EPA Incorrectly Assessed Future Uses Of The Site

U.S. EPA unreasonably and incorrectly assumes that the Himco property will be used in the future for residential, industrial, and agricultural purposes. These assumptions, and U.S. EPA's conclusion that a resulting future risk exists, are erroneous.

The National Contingency Plan ("NCP") requires U.S. EPA to evaluate not only the potential, but also the likelihood, that future populations will be exposed to contaminants on the subject property. See 55 Fed. Reg. 8710 (March 8, 1990). "[A]n assumption of future residential land use may not be justifiable if the probability that the site will support residential future use is small." 55 Fed. Reg. 8710 (March, 1990); Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual Part A ("RAGS"), at 6-7 (December, 1989) (emphasis added).[7]

Here, U.S. EPA's Risk Assessment fails to adequately consider relevant site conditions which leave no doubt that the Himco site never will be used for residential, industrial or agricultural purposes. Local practice and common sense indicate that a closed landfill is not a likely or suitable location for any residential or commercial construction. The ISBH recognized this in 1984 when it restricted construction of any type on the site. See Exhibit E, ISBH letters to Elkhart Department of Health dated August 14, 1984 and September 4, 1984. ISBH stated "we still strongly recommend that this site not be used for construction of buildings of any type." Id. U.S. EPA likewise recognizes that the site is an unlikely location for any future uses:

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[7] Guidance states, "In determining the potential for future residential land use, the RPM should consider: historical land use; suitability for residential development; local zoning; and land use trends." RAGS Supplemental Guidance (March 25, 1991), at 5. Here U.S. EPA failed to properly "evaluate [these] pertinent information sources." RAGS (Dec. 1989) at 6-7.

> Hypothetical future land uses are possible, but may not be technically and/or financially reasonable. The composition of the natural soils in combination with the shallow water table and fill material would make construction on the site difficult and potentially costly.

RA, at 3-4. Also, U.S. EPA notes:

> It is extremely unlikely that construction of a house or commercial plant would occur on this waste mass (landfilled) area of the site due to structural and economic considerations.

RA, at 3-20.

Moreover, U.S. EPA failed to consider that much of the site is zoned for agricultural or manufacturing purposes and not for residential use. Even so, the property does not support these uses. The soils are suitable for growth of prairie vegetation but not for general agriculture purposes, nor are they sufficiently stable for construction. See RA (RI Vol. 5), at A1-6 (site is "infertile" except for variety of prairie vegetation and wild flowers). Past use of the site for agricultural purposes is not sufficient rationale for assuming future agricultural use. U.S. EPA completely fails to recognize that under present No Action conditions, residential and industrial use of the site is not only extremely unlikely, but also is prohibited.

2. U.S. EPA Fails To Properly Assess The Fact That There Is No Present (And No Future) Groundwater Use

There is absolutely no basis to expect any on-site groundwater use in the future at Himco. Nor is there any likelihood that groundwater will be used downgradient of the

landfill. U.S. EPA determined that the local aquifer is naturally of poor quality as a result of the presence of background contaminants. U.S. EPA concluded that background contaminants contribute excess cancer risks in the range of 6×10^{-4}. See RA (RI Vol. 5), at 5-14 and § V.B.2., herein. Therefore, the aquifer is not potable. Since this aquifer is not a potential drinking water source, it is not appropriate to calculate future risk based on the ingestion of groundwater onsite or south of the landfill.

Also, the area downgradient of the landfill is fully serviced by a municipal water supply, and Indiana law prohibits well drilling at former landfill areas. See Indiana Administrative Code, 310 IAC § 16-3-2. Therefore, ingestion of groundwater should be eliminated from the Risk Assessment because it is a non-existent and highly unlikely hypothetical pathway.

3. U.S. EPA's Calculation Of Exposure For On-Site Recreational Use By Trespassers Is Flawed

U.S. EPA's claim that dirt bike riders who trespass on the site will be exposed also is flawed. It is noteworthy that this so-called recreational use is not permitted and is unlawful. Thus, U.S. EPA's assumption that this conduct will continue for 30 years has no merit.

U.S. EPA states that the estimation of the emission rate of respirable particulates (PM_{10}) from dirt bike riding is based on an equation for vehicle traffic over unpaved surfaces that was developed by Cowherd et al. The equation used, however,

totally ignores one of the essential terms originally found in the Cowherd et al. equation. The missing term accounts for the number of days of precipitation, during which dust emissions would not be expected to occur. No explanation is provided in the Risk Assessment for excluding this term, nor is there a discussion of the extent to which U.S. EPA has overestimated the risks associated with this exposure pathway, because of the omission. Emissions of PM_{10} caused by activities that disturb the soil are highly dependent on silt content of the soil. The silt content of soil in the landfill area U.S EPA used to estimate PM_{10} emissions from dirt bike riding (33%, RI, at A2-4) and the value used for estimating tilling emissions (80%, RI at A2-7) are inconsistent. The inconsistency is not explained or justified.

4. The Risk Assessment's Model To Estimate Air Concentrations For Certain Pathways Is Flawed

The box model used in the Risk Assessment to estimate on-site concentrations for the dirt biker and agricultural tilling scenarios and off-site concentrations for the downwind resident scenario, is flawed for the following reasons:

- The box height, H, should be the height of the downwind side of the box. The use of one-half the height of the box, as done in the Risk Assessment, is incorrect.
- The value of X, the distance from the upwind to the downwind edge of the box, is correct only if the boxed area is assumed to be square. This assumption is not stated in the text.
- The average wind speed through the box, u, used in the model should be the wind speed measured (or

estimated) at an altitude of one-half the box height (4.35 meters in the Risk Assessment). The elevation of the wind speed measurement used in the Risk Assessment box model is not indicated in the text. The average wind speed used in the box model and the wind speed used in the wind erosion equation in the Risk Assessment are the same. However, the wind speed used in the wind erosion equation is typically the annual average wind speed measured at a height of 10 meters at a nearby weather station. Thus, it appears that the wind speed in the box model is incorrect (not appropriate for an altitude of one-half the box height).

- The contaminant air concentration estimated for the current off-site downwind resident scenario is based on the air concentration calculated within the box on-site. Downwind dispersion of contaminants is not properly accounted for by this method. Therefore, the use of the box model to estimate air concentrations off-site is incorrect.

- It is totally unreasonable to assume that an adult will dirt bike on the landfill area for an exposure duration of 30 years. U.S. EPA Risk Assessments properly attribute this occasional activity to trespassing teenagers only, with a resulting exposure duration of only a few years.

5. <u>Other Exposure Analyses are Flawed</u>

In addition, there are other improper exposure assessments including the following:

- Exposure concentration estimates for soil are biased high and misapplied. Soil sampling targeted suspected hot spots rather than a random sampling. The Risk Assessment incorrectly assumed that exposure concentrations are uniform across the site and did not evaluate exposure concentrations in sub-areas of the site that correspond to particular exposure scenarios.

- U.S. EPA also adopted an unacceptable approach to modeling lead exposure from air emissions. It added exposures predicted for short-term exposures while trespassing to the concentration of the default exposure resulting in an artificially elevated exposure concentration that is not

representative of long-term atmospheric exposures. U.S. EPA should have used whichever of the two values is higher site-specific average. The model is designed to determine blood lead levels from steady-state exposure, not episodic increases in atmospheric lead concentrations.

- Parameter values for several exposure factors are arbitrary, not justified or not consistent with EPA guidance. For example, total surface area for children is based on old guidance. Values from the 1990 Exposure Factors Handbook cites lower values than the 1989 guidance used. In general, surface area for body parts appear to be too high, and there is not enough detailed information to evaluate the calculations.

- Numerical inconsistencies suggest that quality assurance measures were not adequate. For example, incorrect HIF (human intake factor) values are used to estimate hazard quotients and cancer risks associated with exposure to VOCs and particulates by the agricultural worker. The HIF values estimated in Table 3-9 of the exposure assessment section for each of these two pathways have been reversed from those in the risk tables in the appendix.

- The exposure assessment for showering arbitrarily assumes that the intake associated with inhalation is twice that associated with groundwater ingestion. This neglects differences among VOCs in their tendency to volatilize and their relative bioavailability via ingestion and inhalation.

- The estimate of the PM_{10} air concentration for an agricultural worker is estimated as 3.6×10^{-5} kg/m^3 ($36\ mg/m^3$), which is more than 7 times the permissible exposure limit for respirable particulate set by OSHA. This estimate is excessive and unreasonable.

- Endpoint-specific estimates of the noncarcinogenic hazard index should have been developed per U.S. EPA guidance (RAGS). The Risk Assessment fails to provide any rationale for not doing so. This is especially critical give the magnitude of the estimated hazard indices in the risk assessment.

B. U.S. EPA's Risk Assessment Calculations Are Based On Improper Assumptions and Flawed Procedures

1. U.S. EPA's Detection Limit Assumptions Are Unsupported and Violate U.S. EPA Guidance

U.S. EPA presumes groundwater underneath the site is contaminated. U.S. EPA is only able to make this presumption by concluding chemicals not actually detected in the groundwater are present there at one-half their detection limits.[8] In other words, U.S. EPA assumes that certain chemicals are present in the groundwater even though they were not detected in any groundwater samples. This assumption violates U.S. EPA's guidance and the NCP.

U.S. EPA is permitted to assume that a chemical is present in a sample at half its detection limit where the chemical also is found in other samples in the same medium. See RAGS, § 5.3.3, at 5-10. However, U.S. EPA must "eliminate those samples that have not been detected in any sample of a particular medium." RAGS § 5.3.5, at 5-11. U.S. EPA's guidance is clear on this point:

> The outcome of this step is a data set that only contains chemicals for which positive data (i.e. analytical results for which

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[8] Nowhere in the RA report are the contract required detection limits ("CRQLs") or the instrument detection limits ("IDLs") listed. It is unclear which detection limits were used as surrogate concentrations for non-detect samples. Because CRQLs are higher than IDLs and because IDLs represent the true limits of analytical detection in a sample, use of one-half the CRQL value for non-detect sample concentrations adds significant bias to estimated exposure concentrations. This source of uncertainty in the exposure and risk estimates is not considered in the RA report.

> measurable concentrations are reported) are available in at least one sample from each medium.

Id. Thus, the half detection assumption is invalid between different media. U.S. EPA cannot assume chemicals are present in groundwater simply because they are present in other media such as soil or leachate. See RAGS, at § 5.5.5.

Here, U.S. EPA repeatedly violated its guidance by assuming over a dozen chemicals were present in groundwater even though they never were detected there, including: 1, 1-dichloroethene, aldrin, alpha-chlordane, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, bromodichloromethane, chloroform, chrysene, dieldrin, gamma-chlordane, indeno(1,2,3-cd)pyrene, styrene, tetrachloroethylene, and vinyl chloride. See RA (RI Vol. 5), at 5-6, Table 5-4. U.S. EPA admits that these data are improperly included: "It is important to remember that there is no reason to believe these chemicals are actually present at Himco at least at levels approaching detection limits." RI, at 6-1. Yet, U.S. EPA includes the data anyway.

U.S. EPA's improper inclusion of these chemicals in its Risk Assessment analysis completely undermines its basis for taking action at the site, because, as U.S. EPA admits, over 80% of the potential future carcinogenic risk is attributable to this half detection limit assumption. See RA (RI Vol. 5), at 5-5. With respect to groundwater contamination south of the landfill, U.S. EPA plainly concedes this fact: "Virtually all this risk,

however, is attributable either to chemicals not detected . . . or to chemicals attributable to upgradient or background sources." RA (RI Vol. 5), at 5-14.

U.S. EPA also erroneously calculated non-carcinogenic risk based upon an improper half-detection limit assumption, for several substances, including alpha-chlordane, beryllium, and nitrate/nitrite. Use of this assumption resulted in erroneous hazard quotients ("HQs") of greater than one for these chemicals. See RA (RI Vol. 5), at 5-8.

2. The U.S. EPA's Future Risk Evaluation Fails To Eliminate Chemicals Found At Or Below Background Levels

"In conducting a Risk Assessment, it is critical to distinguish site contamination from background levels due to anthropogenic or naturally-occurring contamination, in order to determine the presence or absence of contamination." Guidance for Data Useability in Risk Assessment, U.S. EPA/540/G-90/008 Directive: 9285.7-05 (Oct. 19, 1990), Ch. 1.1.4 and Ch. 6.1.2. U.S. EPA must evaluate background and blank data to determine whether chemicals were: (1) equivalent to background concentrations; (2) the result of laboratory contamination; or (3) site related.

The Himco Risk Assessment improperly combines naturally occurring substances, site-related substances, and contaminants from all other sources. As U.S. EPA's consultant admits:

> In this risk characterization, risk estimates have been calculated without regard to the source of the contamination. That is, all chemicals detected during

> the RI sampling were assumed to be site-related. There is some question as to whether some of the calculated risks could be attributable to background, either natural or relative to other source.

RA (RI Vol.5), at 5-12; 5-14 (emphasis added).

U.S. EPA improperly evaluates only total risk; that is, risk from all substances whether present naturally in background or not. Risk associated with background concentrations have not been eliminated. See RAGS, at § 5.

Indeed, U.S. EPA concluded that arsenic, beryllium, bromodichloromethane, chloroform, and bis(2-ethylhexyl)phthalate were detected in background groundwater at concentrations that contribute excess cancer risks in the range of 6×10^{-4}. RA (RI Vol. 5), at Table 5-9. Arsenic and nitrate/nitrite dominate the noncarcinogenic risks, which have hazard indices in excess of one for background water quality. Id. U.S. EPA then erroneously included these background chemicals in the risk analysis to conclude that there is a risk from the hypothetical future use of groundwater below the landfill. See RA (RI Vol. 5), at 5-14 and Table 5-9.

Several metals, especially beryllium and antimony in groundwater and chromium in soil, also are present at concentrations at or below background levels and, therefore, were inappropriately considered in the Risk Assessment. This error is critical because these metals are primarily responsible for U.S.

EPA's conclusion that a future non-carcinogenic risk associated with soil exists.[9]

In addition, on-site values for cobalt, silver, and thallium were found below groundwater background levels. On-site concentrations of barium, beryllium, chromium, cobalt, nickel, thallium, and vanadium also are below background soil levels. These chemicals should be eliminated from the risk evaluation.

U.S. EPA also failed to properly evaluate sample blanks to determine whether some chemicals may be attributable to laboratory contamination. Analysis of trip blanks and field blanks indicate that acetone, bromodichloromethane, carbon disulfide, chloroform and methylene chloride found in samples are likely the result of laboratory contamination.[10]

These errors are highly significant, especially when combined with the half detection error. As noted, U.S. EPA admits that over 80% of its future carcinogenic risk is attri-

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[9] U.S. EPA concluded that there is an unacceptable risk due to chromium and hypothetical future agricultural workers through a soil to air pathway. See RA (RI Vol. 5), at 5-8. This conclusion is completely erroneous, since chromium is higher in background than the levels found on-site.

[10] Furthermore, U.S. EPA Guidance states that detected substances that also are detected in blank samples are not considered to be site-related unless the sample concentration exceeds by five times or more the level in blanks. RAGS (Dec. 1989) at 5-17. For common laboratory contaminants (e.g., acetone, 2-butanone, phthalate esters, methylene chloride, and toluene) the sample is not to be considered site-related unless the sample concentration exceeds by ten times or more the level in the blanks. RAGS (Dec. 1989) at 5-16. There is no indication that either of these practices were observed when determining the list of chemicals of potential concern.

buted to non-detected chemicals. The other 20%, however, is attributable to background. In both cases, U.S. EPA cannot conclude these chemicals are site-related.

U.S. EPA's improper inclusion of background chemicals in its risk calculation is scientifically flawed, violates U.S. EPA guidance, and is inconsistent with the NCP.

3. U.S. EPA Improperly Included Leachate Data To Calculate Groundwater Contamination

U.S. EPA's Risk Assessment conclusions are based on erroneous assumptions that consider perched leachate as identical to groundwater (aquifer) samples beneath the landfill. U.S. EPA used data from two monitoring wells located on-site but also erroneously included landfill leachate data. The RI asserts that "contaminants which posed unacceptable risk in the landfill groundwater scenario were primarily found in leachate from the landfill." RI at 4-7. Leachate data was improperly used throughout the groundwater risk analysis to calculate contaminant exposure point concentrations ("EPC") for on-site groundwater. The EPC forms the basis of calculating dose to the population and therefore is critical in determining carcinogenic and non-carcinogenic risk.

In this case, the leachate is encapsulated or perched between layers of calcium sulfate above the groundwater table. U.S. EPA concedes this, then later ignores it: "leachate water, overall, was primarily found at elevations above the water table . . . our test pits encountered leachate at elevations ranging

between approximately three to nine feet above the water table elevations . . . ." RI, at 3-3. Moreover, U.S. EPA recognizes "contaminants from the landfill appear to be strongly held to the landfill waste mass." RI, Vol. 1, at 7-5 (Conclusions, Fate and Transport). U.S. EPA further concedes the groundwater "remains unimpacted" some thirty-two years after landfill operations began and that groundwater downgradient from the landfill is not contaminated.

U.S. EPA improperly included leachate data to exaggerate the presence and concentration of contaminants found in groundwater, by combining leachate data with actual groundwater data to calculate exposure point concentrations. Concentrations of chemicals, VOCs, SVOCs, and inorganics, in leachate were orders of magnitude higher than what was found in groundwater. See generally RI, Vol. 1, at § 4.4. This error resulted in EPCs which are greatly exaggerated and unacceptable.

Moreover, if a chemical was not found in any on-site monitoring well, but was found in a leachate sample, U.S. EPA assumed that the chemical was present in on-site groundwater at the same concentration as the leachate sample. Without explanation, U.S. EPA then assumed for off-site groundwater, that the contaminant was present at one half detection limits. Using these improper assumptions add significant bias to the entire RI.

The following chemicals were not detected in any monitoring wells, where exposure point concentrations for on-site groundwater were derived solely using leachate data. This list

is not exhaustive but addresses the contaminants considered to be significant in driving the risk evaluation:

1. Volatile organics, including vinyl chloride, carbon disulfide;

2. Semi-volatile organics, including benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, chysene, indeno(1,2,3-cd)pyrene;

3. Pesticides including alpha-chlordane; and

4. Inorganics including, antimony and cadmium.

See RI, Tables A1-1, A1-5, A4-8, A4-9, A4-10, and Appendix 5. Including these contaminants adds significant bias to U.S. EPA's Risk Assessment conclusions.

4. U.S. EPA's Failure To Delete Chemicals Infrequently Detected Is Contrary To Guidance

"Chemicals that are infrequently detected may be artifacts in the data due to sampling, analytical, or other problems and therefore may not be related to site operations or disposal practices." RAGS (Dec. 1989) at 5-22. Generally, U.S. EPA should eliminate chemicals detected in less than 5% of the samples as chemicals of potential concern. Here, however, U.S. EPA improperly includes all chemicals detected, including all substances detected without regard to frequency of detection.[11]

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[11] In those cases where a chemical was not detected in groundwater, and was detected infrequently in soil, U.S. EPA's practice improperly biased the concentrations of chemicals in groundwater as high when they may in fact be low. This bias occurs, for example, with 1,1-dichloroethene, 2-butanone, indeno(1,2,3-cd)pyrene, chrysene, styrene, tetrachloroethene,
(continued...)

5. The Risk Assessment Used Incorrect Toxicity Values

U.S. EPA also improperly relied on outdated toxicity values in its Himco Risk Assessment, i.e., RfD, RFC, cancer slope factor, and cancer unit risk levels. U.S. EPA failed to develop or consider any site specific toxicity values. Instead, the oral and inhalation toxicity values used in the Risk Assessment were cited to the IRIS (Integrated Risk Information System) Database (April 1992) or to HEAST (Health Effects Assessment Summary Tables; 1991). Given that the Risk Assessment was not submitted until August 1992, the IRIS database update from at least July 1992 should have been used. Also, the updated April 1992 version of HEAST should have been used. Failure to use the proper and relevant values is a fundamental error, contrary to guidance which requires that current and proper values be used in calculating risk.

The toxicity values used in the Risk Assessment were compared to updated values obtained from the October update of the IRIS database and the 1992 version of HEAST. The use of the outdated sources introduced a significant number of errors in toxicity values. The most significant effect was the use of the outdated slope factor of 12 $(mg/kg/day)^{-1}$ for benzo(a)pyrene. The proper present slope factor is 7.3 $(mg/kg/day)^{-1}$, and should

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[11] (...continued)
2-methylnapthalene, acenaphthylene, benzoic acid, napthalene, $4,4^1$-DDE, and $4,4^1$-DDT.

have been used. This slope factor was available July 1992. The use of the incorrect slope factor compounded the errors because U.S. EPA also used it as the default value for other carcinogenic PAHs. The carcinogenic PAHs are significant contributors to total risk in several oral ingestion pathways. U.S. EPA used incorrect values as default slope factors for several other PAHs, including benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,2-cd)pyrene.

Moreover, the use of the slope factor for benzo(a)pyrene as a default for the other carcinogenic PAHs is outdated and unacceptable. U.S. EPA presently uses Toxicity Equivalent Factors ("TEFs") to derive slope factors for the PAHs which evaluate PAHs relative to benzo(a)pyrene because it is more accurate. Using the proper TEFs to determine carcinogenic risks from soil ingestion for hypothetical future residents and plant workers south of the site actually results in accepted exposures within U.S. EPA's safe range of 1×10^{-6} to 1×10^{-4}. Given that the U.S. EPA has assigned TEF values for the carcinogenic PAHs, it is clear that there is a difference in toxicity among the PAHs.

The Risk Assessment also failed to properly consider the uncertainty associated with absorption of beryllium. For many of the dermal exposure pathways, beryllium is claimed to be most significant contributor to total pathway risk. There is, however, significant uncertainty associated with the dermal

absorption of beryllium. In fact, U.S. EPA reported in a health effects assessment of beryllium that it is unlikely that significant beryllium absorption will occur through intact skin (U.S. EPA 1986, Health Assessment Document for Beryllium, Office of Health and Environmental Assessment, Washington, D.C. EPA/600/8-84/026B). U.S. EPA also fails to consider the significant uncertainty associated with the gastrointestinal absorption of beryllium in the uncertainty section of the Risk Assessment.

6. Data Validation Procedures Are Inadequate

Data validation procedures are not sufficiently documented in the Risk Assessment or the Remedial Investigation. It is unclear if the data have been validated by the laboratory or by an independent data validator, which is more appropriate, is generally necessary, and entails specific procedures. Because of these uncertainties, it is impossible to evaluate whether a thorough and authoritative data review was performed.

7. The Analysis of Uncertainties Is Inadequate; Uncertainties Support the Conclusion That There Is No Risk

U.S. EPA fails to adequately consider all major sources of uncertainty in its underlying data, methods, assumptions and therefore fails to provide a suitable basis for remedy selection. Uncertainties due to data quality have not been adequately considered in the risk characterization. For instance, data for several constituents (e.g., beryllium, lead, and mercury) in trench leachate samples are listed as useable (see RI, at Table

4-17), even though sample spike recoveries were not within control limits.

Also, risks associated with exposure to chromium in the Risk Assessment are based on the assumption that all chromium is in the hexavalent form. This assumption is highly conservative and the uncertainties associated with this assumption are not discussed in the Risk Assessment.

8. U.S. EPA Failed To Consider The Effectiveness of the Existing Calcium Sulfate Cover And Layering

U.S. EPA failed to consider the unique physical characteristics of the Himco site in evaluating risk. In particular, it failed to properly analyze the containment characteristics of the landfill created by calcium sulfate layering and the present calcium sulfate and soil cap. It also disregarded the layering and cap's effectiveness. While U.S. EPA concludes there is no groundwater contamination which poses a health risk, some thirty-two years after the initial landfill and sixteen years after final closure, it fails also to conclude that the existing calcium sulfate cover and layering are fully containing the waste and any leachate.

Calcium sulfate accounts for approximately two-thirds of the fill material at the landfill. RI, at 1-3. Interestingly, U.S. EPA reports that the calcium sulfate cover is so hard in places that it cannot be penetrated with a backhoe. The FS technical report indicates that the average thickness of the calcium sulfate cover ranges from 9 to 48 inches. FS, Vol. 2,

Technical Memorandum A1. A significant portion of the landfill is covered with 4 to 9 feet of calcium sulfate. Id. Layers of calcium sulfate averaging 18 inches were strategically placed between layers of waste during the landfilling process, encapsulating the waste in calcium sulfate. (See Exhibit B, Perrin Affidavit, at ¶ 4). U.S. EPA's tests show that the calcium sulfate exhibited a very low permeability of 1 x 10^{-10}cm/sec, similar to shale. FS, Appendix A, Technical Memorandum A2. This permeability is the same as clay. Thus, the waste is encapsulated by impermeable clay-like layers.[12]

U.S. EPA improperly failed to fully evaluate the containment characteristics of the cover and layering. The U.S. EPA guidance directs:

> If the existing cap, or a layer within the existing cap, is expected to have a low permeability, a combination of laboratory permeability tests on undisturbed samples and field (in situ) permeability tests is recommended . . . . (EPA/540/P-91/001 Section 3.1.1.2.)

U.S. EPA estimated permeability based on tests from one sample which was not even in-situ, but was a sample prepared for

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[12] The RI makes no mention of the calcium sulfate layering within the landfill. It incorrectly assumes that this layering is not existent and states that under the calcium sulfate cover, an estimated 15 to 20 feet thick waste layer is present. RI Conclusions at 7-2. U.S. EPA also fails to assess formation of insoluble heavy metal salts, or ongoing bioremediation at the site.

consolidation tests.[13] See FS, Vol 2., Technical Memorandum A2 ("Calculation of Permeability of the Calcium Sulfate Layer").

U.S. EPA stated it could not precisely identify the reasons for the low permeability of the calcium sulfate cover of 1 x 10^{-10} cm/sec range but that it "may be due to the chemical interaction between the soil (calcium sulfate) and water media." Id. Yet, for no apparent reason, U.S. EPA concluded that a further evaluation of these variables was beyond the scope of its investigation.[14] U.S. EPA simply estimated permeability of the cover (without explanation) as more permeable than the calculated results. These more permeable values were used to calculate leachate volume estimates, which resulted in a great overestimate of volume.

9. U.S. EPA's Analysis of Leachate Generation Rate Is Flawed

U.S. EPA used arbitrary parameter values to consider the effect of the calcium sulfate cover and disregarded the effect of the calcium sulfate layering on leachate migration. U.S. EPA concedes that "perhaps the primary uncertainties related to the Himco remedial investigation pertain to the depth of waste

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[13] Twelve geotechnical samples were collected for laboratory analysis; however, testing was limited to slope stability parameters for the new cap design.

[14] The FS technical memorandum states that since in-situ permeability could not be estimated from the data, it simply assumed a value ranging from 1x10^{-5} to 1x10^{-10} cm/sec range as the in-situ permeability for the calcium sulfate cover. FS. Vol. 2, Technical Memorandum A2.

in the landfill and the rate of leachate filtration into the groundwater." RI, at 7-9 (Data Limitations).

U.S. EPA used the Hydrologic Evaluation of Landfill Program ("HELP") to estimate leachate generation rates for three scenarios: no action, single cap and composite cap. The analyses are flawed.

The parameter value chosen for the saturated hydraulic conductivity of the calcium sulfate layer is arbitrary and is as much as 1,000 times too large, thereby greatly overestimating leachate generation rates. Two estimates of the saturated hydraulic conductivity (permeability) are presented: a value of 1×10^{-10} cm/sec was estimated based upon consolidation data and a value of 1×10^{-5} cm/sec, or 100,000 times higher, was based upon a limited evaluation of the grain size distribution. FS, Technical Memorandum, at A2. The HELP simulations used neither value, arbitrarily choosing a value of 8.5×10^{-7} cm/sec. In fact, the better estimate is 1×10^{-10} cm/sec, because consolidation tests are a common method for determining hydraulic conductivity of materials, like clays, with low permeabilities. See, e.g., R.A. Freeze and J.A. Cherry, *Groundwater*, (1979) at 337. It is unreliable to base a hydraulic conductivity estimate on a grain size analysis alone. Furthermore, U.S. EPA misused the Unified Soil Classification System ("USCS") in judging the calcium sulfate material as an ML material, because the Atterberg Limits test, which forms the basis for making USCS determinations, apparently was not conducted. On this basis, the

1×10^{-5} cm/sec estimate cannot be considered reliable and the value of 8.5×10^{-7} cm/sec is arbitrary.

Analyses also were not conducted to evaluate the sensitivity of key parameter assumptions regarding predicted leachate generation rates. Key parameters include the hydraulic conductivity of the calcium sulfate material. For example, had the better (i.e., 1×10^{-10} cm/sec) estimate of hydraulic conductivity been employed in the HELP simulations for the No Action case, predicted leachate generation rates would have been substantially reduced to levels approximating those obtained by U.S. EPA for a composite cap. Additionally, simulations should be based upon long-term average climatological data, rather than the single unspecified year of data used by U.S. EPA. In sum, U.S. EPA's analysis of leachate generation rate is incorrect and arbitrary, and fails to reflect the true effectiveness of the existing calcium sulfate cover and layering.

VI. U.S. EPA'S FEASIBILITY STUDY IS FLAWED

A. U.S. EPA's Entire Remedy Selection Process Is Based On An Improper Risk Determination

U.S. EPA's proposed remedy seeks to address a hypothetical future risk which will not occur. Had U.S. EPA properly concluded that there is no hypothetical future risk at Himco, the only proper remedial alternative would have been No Action (either with or without institutional controls) and delisting of the site from the NPL.

B. The Remedial Action Objectives Are Fully Satisfied By No Action

As stated in the FS, § 2.2.1, the Remedial Action Objectives ("RAOs") were not based on risk-based cleanup goals because:

(1) The target cancer risk level of 1 in 10,000 is exceeded by levels of contaminants in background;

(2) Groundwater in the vicinity has not been impacted adversely by the landfill; and

(3) There is no present risk at the property.

The RAOs instead were designed to prevent contact with the fill material and containment.

The FS identifies four RAOs for the Himco site: (1) to prevent direct contact with contaminated soils; (2) to control groundwater usage around the site; (3) to minimize contaminant leaching to groundwater to ensure that groundwater "remains unimpacted"; and, (4) to maintain long-term cap integrity. FS at 2-2. U.S. EPA apparently concluded that the only way to satisfy the remedial action objectives was to place an additional cap over the entire landfill. However, screening out all other alternatives is inappropriate because each objective is fully satisfied without a cap.

It is important to note U.S. EPA found no groundwater contamination more than thirty-two years after landfill operations began. Maintenance of the status quo (i.e., no action) is all that is necessary or desirable. Fencing of the site will further restrict access and limit potential exposures.

Specific deed restrictions, in addition to the current land use restrictions discussed above, will confirm no future residential, industrial or agricultural use of the property or the groundwater. These additional restrictions also would ensure that all present and future populations are prevented from ingesting groundwater and from direct contact with soil or landfill contents. The existing calcium sulfate and soil cover prevents direct contact with the landfill contents. Because there is no evidence of contaminant leaching, no additional capping is required or appropriate. As demonstrated herein, the No Action alternative (with or without institutional controls and groundwater monitoring) best satisfies the goals of the nine NCP remediation evaluation criteria.[15]

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[15] As discussed herein, the No Action alternative is fully protective of human health and the environment. Pertinent ARARs are met. Other federal and state ARARs, including those for landfill closure and containment, are satisfied under CERCLA § 121(d)(4)(D) and 40 CFR § 340(f)(1)(ii)(C)(4) which justify waiver where equivalent remedial results can be achieved through another method or approach. Here, the landfill was properly closed by consent agreement with ISBH in 1976 meeting all applicable closure requirements at that time. Containment is achieved via the existing cover which satisfies the remedial objectives for the site. A composite barrier cap with a gas collection and treatment system is unnecessary. U.S. EPA found that landfill gas analyses show virtually no VOC emissions from the landfill. See FS at 1-9; 1-11.

VII. U.S. EPA'S PROPOSED REMEDY IS CONTRARY TO GUIDANCE AND INCONSISTENT WITH THE NCP

A. U.S. EPA Failed To Conduct A Proper Preliminary Assessment In Violation Of the NCP

U.S. EPA failed to comply with the NCP requirements for a Remedial Preliminary Assessment ("PA"). See 40 CFR §§ 300.420, 300.5 and 300.305. Its purpose is "to determine if a release may require additional investigation or action" and "to eliminate from further consideration those sites that pose no threat to public health or the environment." Id. § 300.420(b)(i). U.S. EPA made several incorrect assumptions concerning the ability of leachate to migrate and the permeability of the site soil in concluding the site posed a risk. See U.S. EPA PA, Part 3 (Feb. 1984). U.S. EPA's assumptions and its PA were incorrect because, as it later concludes, there is no present risk at the site. See RI, § 7 (Conclusions).

B. U.S. EPA Failed "To Ensure That Appropriate Remedial Alternatives Are Developed"

The NCP states that the primary objective of the Feasibility Study is to ensure that appropriate remedial alternatives are developed so that an appropriate remedy can be selected. 40 CFR § 300.430(e)(1). This FS clearly fails the primary purpose of the Feasibility Study because it fails to develop and fully evaluate appropriate remedial alternatives. Importantly, U.S. EPA failed to properly develop the No Action alternative, failed to properly consider institutional controls and groundwater monitoring as a remedial alternative in its FS.

These alternatives, although appropriate for consideration, were improperly rejected without adequate analysis.

C. U.S. EPA Failed To Develop The No Action Alternative

The No Action alternative must be "developed" in a Feasibility Study. See 40 CFR § 300.430(e)(7). U.S. EPA must consider the short-term and long-term aspects of effectiveness, implementability, and cost when developing and screening alternatives, including No Action.

In this case, U.S. EPA summarily rejects the No Action alternative as inadequate to protect human health and the environment. It does so without explanation, and in contradiction to its own conclusion that there is "no unacceptable risk to human health and the environment" on or off the site.

U.S. EPA fails to consider existing site restrictions and conditions that prevent future residential, industrial and agricultural use of the landfill. It also disregards the fact that all water downgradient of the landfill is provided by municipal wells and that well-drilling near or on the landfill is prohibited. It also ignores the calcium sulfate cover and layering which is adequately containing the landfill wastes. It disregards the complete lack of present risk, and the lack of future risk. It does not consider the use of institutional controls such as fencing, and deed restrictions, nor does it consider the use of groundwater monitoring, which are typically included as part of No Action remediations. No reason or basis

for rejecting the No Action alternative is provided. For these reasons, U.S. EPA's dismissal of the No Action alternative is inconsistent with the NCP.

D. The Selected Remedy Is Inconsistent With the NCP Because It Is Not Cost-Effective

The selected remedy, alternative four, is not cost-effective. Cost-effectiveness is a necessary element for any selected remedy. See 40 CFR § 300.430(f)(1)(ii)(D). Several courts have denied recovery of response costs based on lack of cost-effectiveness. See 42 U.S.C. § 9605(a)(7). In United States v. American Cyanamid Co., 786 F. Supp. 152, 162 (D. R.I. 1992), for example, the court stated that cost-effectiveness is a criteria to challenge the U.S. EPA when choosing a permanent remedy for a site among various alternatives.

In evaluating a remedy for cost-effectiveness, the NCP requires that overall protectiveness be compared to cost. A remedy is considered cost-effective if its costs are proportional to its overall protectiveness. See 40 CFR § 300.430(f)(1)(i)(D). Here, the cost of the selected remedy is not proportional to the benefit received. It provides little remedial value for a total cost of nearly $12 million. The extremely expensive cap provides absolutely no benefit, inasmuch as No Action (or No Action with institutional controls) adequately addresses U.S. EPA's perceived future risk.

VIII. THE CONCLUSIONS OF THE RI/FS AND U.S. EPA'S PROPOSED REMEDY ARE ARBITRARY AND CAPRICIOUS AND CONTRARY TO LAW

U.S. EPA's remedy is unenforceable if the agency's decision was arbitrary, capricious, or otherwise in accordance with law. Section 113(j)(2) of CERCLA, 42 U.S.C. § 9613(j). "The plain language of Section 113(j) of CERCLA, as amended by SARA, requires the conclusion that judicial review of U.S. EPA's remedy decision in CERCLA cases must be based on the administrative record, applying the arbitrary and capricious standard . . . ." U.S. v. Seymour Recycling Corp., 679 F. Supp. 859, 861-62 (S.D. Ind. 1987); Asarco v. U.S. EPA, 616 F.2d 1153, 1161 (9th Cir. 1980) (EPA action was arbitrary and capricious) (to meet standard EPA must have "considered all relevant factors in arriving at its decision").

Several courts have found that U.S. EPA acted arbitrarily and capriciously where it improperly evaluated site risks contrary to its guidance and the NCP. For example, in Kent County v. U.S. EPA, 963 F.2d 391, 395 (D.C. Cir. 1992), the D.C. Circuit found that U.S. EPA's failure to consider both filtered and unfiltered samples in analyzing groundwater contamination was inconsistent with U.S. EPA guidance on the subject and was arbitrary and capricious. Similarly, in Anne Arundel County v. U.S. EPA, 963 F.2d 412 (D.C. Cir. 1992), the court held the "U.S. EPA acted arbitrarily and capriciously when it used only unfiltered samples to test the groundwater at the Landfill." Id. In National Gypsum Co. v. U.S. EPA, 968 F.2d 40 (D.C. Cir. 1992),

U.S. EPA acted arbitrarily and capriciously when it used outdated and incorrect toxicity and persistence scores in determining whether the site should be listed on the NPL. Among other technical errors which were inconsistent with U.S. EPA guidance, the U.S. EPA improperly based scores on a highly toxic compound without investigating whether the compound at the site was present in a highly toxic or low toxic form.

As set forth in these Comments, for numerous reasons U.S. EPA's proposed remedy is arbitrary, capricious and otherwise not in accordance with law.

IX. THIS SITE SHOULD BE DELETED FROM THE NATIONAL PRIORITIES LIST

A. Sites Which Pose No Significant Risk to Public Health Or the Environment Should Be Deleted from the NPL

U.S. EPA is authorized and required to delist NPL sites in several circumstances. Indeed, sites which pose no risk to human health or the environment must be deleted from the NPL. Specifically, a site should be deleted where:

> The remedial investigation [RI] has shown that the release poses no significant threat to public health or the environment and, therefore, taking of remedial measures is not appropriate.

See 40 C.F.R. § 300.425(e)(1)(iii). An original HRS score does not dictate whether a site should remain on the NPL. HRS scores are preliminary evaluations and "the information collected to develop HRS scores is not sufficient to determine either the extent of contamination or the appropriate response for a parti-

cular site." E.g., 57 Fed. Reg. 47204-01 (October, 1992). The conclusions of the preliminary assessment and RI/FS studies are intended to determine if the HRS assumptions were accurate and whether the site should, in fact, be remediated:

> After conducting these additional studies, U.S. EPA may conclude that initiating a CERCLA remedial action using the Trust Fund at some sites on the NPL is not appropriate because of more pressing needs at other sites, or because a private party cleanup is already underway pursuant to an enforcement action. Given the limited resources available in the Trust Fund, the Agency must carefully balance the relative needs for response at the numerous sites it has studied. It is also possible that U.S. EPA will conclude after further analysis that the site does not warrant remedial action.

Id. at 7.

The D.C. Circuit has encouraged U.S. EPA to promptly delete sites which pose no human health or environmental risk. As the Court has stated:

> "[r]eleases may be deleted from or recategorized on the NPL where no further response is appropriate." 40 C.F.R. § 300.425(e). We urge the U.S. EPA to move forward, quickly, to a remedial investigation to determine whether [the site] poses any measurable or meaningful health risk; if not, the Agency should act with dispatch to delist the site.

B&B Tritech, Inc. v. U.S. EPA, 957 F.2d 882, 885 (D.C. Cir. 1992).

Further, sites should be deleted where any necessary remedial activities are completed. Completed sites are any sites which are "protective of human health and the environment across all pathways." See Procedures for Completion and Deletion of

National Priorities List Sites (April 1989), at 2. Importantly, completed sites do not include only those where an operable unit remediation plan is implemented. They also include those where cleanup has been performed through removal actions, or "No Action" sites where only monitoring and institutional controls are necessary to protect human health and the environment:

> [Completion] includes sites where first operable unit remedial actions, expedited response actions, or emergency removal actions have been performed and . . . no additional clean up activities are required to achieve protectiveness of human health and the environment. It also includes sites with ROD requiring only monitoring or institutional controls.

Id. at 3 and 5. Thus, whenever U.S. EPA activity at a site achieves protection of human health and the environment (whether it be through remedial actions, past emergency removal actions, or even No Action), U.S. EPA is required to promptly delete the site from the NPL.

The Himco site is protective of human health and the environment. U.S. EPA repeatedly concedes there is no present risk at Himco. As it states, "[the] RI data do not indicate unacceptable [carcinogenic or noncarcinogenic] risk . . . to the current population," and "[t]here appears to be no cause for concern for any current uses of the site." RI, at § 7.2 and ES-4. Further, U.S. EPA's own analyses "places risks within acceptable range as established by the NCP." FS, at ES-3. See also Comments § IV. A., supra (no present risk at or near

landfill). Given U.S. EPA's own conclusion that no present threat exists at Himco, the site should be deleted from the NPL.

There is no future risk to human health or the environment outside the landfill. As U.S. EPA states: "If a home or commercial establishment south of the landfill were to use groundwater in this area in the future, the estimated site-related risks associated with groundwater use are within acceptable risk ranges." RI, at ES-5.

There is no future risk to human health or the environment on-site because the Himco site never will be used for residential, commercial or agricultural purposes. See Comments § V.A., supra. Groundwater use is restricted; downgradient residents in the area are serviced by municipal water. U.S. EPA's Risk Assessment of future groundwater contamination is based on improper assumptions and results in an incorrect analysis. U.S. EPA's conclusion of a hypothetical future threat is erroneous.

B. "No Action" Is Protective Of Human Health and the Environment and the Site Should be Deleted from the NPL

Through past U.S. EPA activity at the site and current use restrictions, U.S. EPA has achieved protection of human health and the environment. U.S. EPA concludes that all past response activities were complete and that there is no present risk on or off-site and no future risk off-site. Even if one accepts U.S. EPA's future risk based on hypothetical future use of the landfill, this risk has been and will continue to be

properly managed under a "No Action" scenario. Site use is precluded by the ISBH and well drilling on the landfill is prohibited by state statute. See Comments § III, supra.

U.S. EPA has deleted many sites from the NPL after completion of the RI. For example, the Reeser's Landfill site was deleted in 1990. See 55 Fed. Reg. 7507-01 (March 2, 1990) attached as Exhibit F. This site was a landfill which received various wastes from 1970 through 1980. Residents in the immediate landfill area used groundwater as their potable water source. The RI Risk Assessment showed no unacceptable risk to human health or the environment. Based on this information, U.S. EPA selected the "No Action" alternative "because no remedial action is required to ensure protection of human health and the environment; thus, deletion of the site from the NPL is appropriate." Id. at 4.

U.S. EPA also deleted the International Minerals site after an RI was completed. See 54 Fed. Reg. 39009-01 (Sept. 22, 1989) attached as Exhibit G. U.S. EPA Region V, approved a Record of Decision which selected the No Action alternative which included (monitoring and maintenance of the existing system) as the preferred remedy. This remedy included periodic monitoring of groundwater, fence maintenance, and long-term maintenance of the cover system. As part of the No Action remedy, the IMC Corporation would continue to monitor the groundwater semi-annually for 5 years and annually thereafter, maintain cap and

site security, and, maintain deed restrictions on the site land use.

Recently, U.S. EPA proposed the Suffern Village Well Field Site for deletion from the NPL. See 57 Fed. Reg. 44546 (Sept. 28, 1992), attached as Exhibit H. This site included a municipal water supply well field. After the site RI was completed, "[a]nalyses for metals [SVOCS and VOCS] indicated that these substances were not a threat to human health or the environment." Id. The only pathway of concern was groundwater bearing 1,1,1,-trichloroethane ("TCEA") and some degradation products which were migrating. Based on this information, U.S. EPA selected the "No Action" alternative because "contaminant levels had been naturally attenuating . . . ." To ensure the appropriateness of the "No Action" remedy, U.S. EPA implemented a two-year monitoring program. After one year of monitoring, U.S. EPA determined that continued monitoring was not warranted based on the fact that the plume was attenuating and the filter system installed by the village virtually eliminated the population's exposure to the low concentrations of TCEA present in the groundwater. U.S. EPA determined that the response actions are protective of human health and the environment and having met the deletion criteria, proposed to delete this site from the NPL. Id.

Another site where the No Action remedy was selected is the Revere Textile site. See EPA Environmental News (September 30, 1992), attached as Exhibit I. This site included

a former textile mill in operation for over 100 years which disposed of pigments, paints and solvents used to dye and clean textiles. U.S. EPA reached conclusions concerning site conditions remarkably similar to Himco. It found small amounts of VOCS, metals, and pesticides on site. Like Himco, it also assumed contamination "might" reside in the groundwater after an initial investigation. Finally, also like Himco, U.S. EPA concluded there was no risk to human health or the environment after completion of the RI.

> EPA found limited contamination in certain areas of the site, but not enough to cause a significant risk to human health or the environment.

Id. All groundwater samples show concentrations near or below detection limits. Further, at Revere Textile, U.S. EPA analyzed the cancer risk associated with future residential use of the site and concluded that risk was outside its acceptable range. U.S. EPA (unlike at Himco) correctly concluded that this use was unreasonable, given "site-specific information" regarding site conditions and past uses, and eliminated the pathway from its final risk analysis. U.S. EPA noted that any uncertainty in its analysis would be fully addressed through continued monitoring at the site. However, unlike Himco, U.S. EPA proposed a No Action remedy, with periodic groundwater monitoring to ensure that contaminant levels do not increase. Id.

U.S. EPA has deleted several other sites after the RI showed no further action was necessary. See, e.g., 54 Fed. Reg.

38876-01 (Poer Farm site deleted); 54 Fed. Reg. 39011-01 (Petersen Sand and Gravel site deleted) and ROD M&T DeLisa Landfill (Sept. 1990) (deleted), attached as Exhibits J, K and L. See also Final Deleted Sites List, attached as Exhibit M.

The Himco site is no different than the above sites. All previous removal actions have been completed. The RI shows no present risk on or off-site, and no future off-site risk. Even if one accepts U.S. EPA's future on-site risk, it is addressed through current land use restrictions.

X. MILES AND HIMCO IS PREPARED TO IMPLEMENT REASONABLE INSTITUTIONAL CONTROLS AND MONITORING

In the interest of securing the property and confirming that the groundwater underneath the Himco property "remains unimpacted," Miles and Himco are prepared to fund the erection of an appropriate fence to further prevent site access and to fund reasonable groundwater monitoring. While these controls are unnecessary given the complete lack of a risk at Himco, Miles and Himco are prepared to fund these efforts to address the public concern at the site.

XI. CONCLUSION

U.S. EPA's investigation at Himco supports only the conclusion, that there is no present or future risk to human health or the environment. The Himco site simply is not creating a threat of contamination at a level of concern and thus no remedy is required. Miles respectfully requests U.S. EPA to

reconsider its analysis, to recommend "No Action", to delete the site from the NPL, and to accept Miles' and Himco's offer to install a fence and conduct periodic monitoring.[16]

Miles Inc.

By Its Counsel

Reed S. Oslan
Karen L. Prena
Rhett Dennerline
Kirkland & Ellis
200 East Randolph Drive
Chicago, IL 60601
(312) 861-2000

Of Counsel:

Richard W. Winchell
Miles Inc.
1127 Myrtle Street
Elkhart, IN 46515

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[16] These Comments identify some of the major deficiencies found in the RI/FS and U.S. EPA's proposed plan for the Himco site. Miles also hereby incorporates by reference the Comments of Himco Waste-Away Service, Inc. Further, Miles hereby reserves the right to identify additional deficiencies in future discussions or litigation. These Comments shall not constitute a waiver of any defense or an admission of any fact or liability by Miles.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

October 8, 1992

Reed S. Oslan
Kirkland & Ellis
200 East Randolph Drive
Chicago, Illinois 60601

HSRL-6J

Dear Mr. Oslan,

This is in response to your request, sent by facsimile to Tom Nash, for an extension to the public comment period for the Himco Dump Superfund Site.

The comment period for this site is scheduled to end on October 29, 1992. A 30-day extension would end the comment period on November 28, which is a Saturday; therefore, I will extend the public comment period for the Himco Dump Superfund Site to November 30, 1992.

Thank you for your interest.

Sincerely,

Mary Elaine Gustafson
Remedial Project Manager

cc: Tom Nash, ORC
Dave Novak, OPA

EXHIBIT A

STATE OF INDIANA)
)SS:
COUNTY OF ELKHART)

AFFIDAVIT OF JERRY D. PERRIN

COMES NOW, Jerry D. Perrin, being first duly sworn upon his oath hereby deposes and says as follows:

1. I am a resident of Elkhart County in Indiana, and have been for over 20 years.

2. Starting in early 1970, I began employment with Himco Waste-Away Services, Inc. (which I also call "Himco") at the County Road 10 Landfill in Elkhart. I worked at the landfill until it closed in October, 1976.

3. During my employment with Himco and subsequently Chas Himes & Sons, I first started as a part-time bulldozer operator. After three weeks, I began directing the landfilling operations and operating the bulldozer on a full time basis. I worked at the landfill over 50 hours, six to seven days each week. I personally directed all of the waste disposal and landfilling operations until Himco closed the landfill in 1976.

4. I conducted and directed the landfilling operations at the property in a consistent and repetitive manner. I placed all the wastes between successive layer of soil and a material known as calcium sulfate. The calcium sulfate was a chalky, inert material shipped to the landfill from Miles, Inc.'s citric acid manufacturing plant at the rate of approximately 16 cubic yards each hour. I directed Himco trucks to dump the waste material in "cells" approximately 50 feet square between rows of calcium sulfate piles, previously dumped by Himco trucks. I would first compact the layer of waste and then cover it with a layer of calcium sulfate, which I pushed over from the piles. I would then compact the calcium sulfate layer with the bulldozer which would be at least 12 and

sometimes 18 inches thick. I also would place a layer of soil approximately four to six inches thick on top of the calcium sulfate at the end of the work day, and compact it. Through this procedure, I created cells of waste material which I encapsulated in soil and calcium sulfate.

5. When another layer of waste material was deposited, I would repeat the above process by also compacting the waste and covering it with a calcium sulfate and soil layer. This process was repeated as I landfilled the property, moving generally from the east to the present western landfill boundary. Through this process, I made successive layers of encapsulated waste material and created at least three, and in some places four, waste and calcium sulfate layers at the landfill.

6. I personally directed the landfilling of at least 90% of the landfill area, in the above manner which I have described. Whenever I did not personally compact and cover the wastes, I personally directed and instructed other Himco employees to do so.

7. When the landfill was closed in 1976, Himco placed a final cover of calcium sulfate averaging at least two feet thick, in addition to a soil cover of at least six inches thick over the entire landfill area. The calcium sulfate was the only material disposed during the last two months before the landfill closed. The landfill was then seeded.

Further Affiant sayeth not.

Jerry D Perrin

Jerry D. Perrin

STATE OF INDIANA)
)
COUNTY OF ELKHART)

Before me, the undersigned, a Notary Public for Elkhart County, State of Indiana, personally appeared Jerry D. Perrin and acknowledged the execution of the foregoing instrument this 30th day of November, 1992.

Richard W. Paulen, Notary Public
Residing in Elkhart County, Indiana

My Commission Expires:

8-29-93

February 10, 1975

IN THE MATTER OF)
)
HIMCO WASTE-AWAY SERVICE, INC.)

STIPULATED FINDINGS OF FACT
AND CONSENT AGREEMENT

1. That the Stream Pollution Control Board of the State of Indiana is an agency of the State of Indiana duly empowered to hold administrative hearings to determine whether or not there have been violations of IC 1971, 13-7, and to enter an order requiring the taking of such action as is indicated by the circumstances to cause the abatement of such violations.

2. That the Stream Pollution Control Board has jurisdiction over both the subject matter and the parties to the action.

3. That on July 2, 1974, staff members of the Indiana Stream Pollution Control Board, notified Mr. Charles Himes, Jr., of Himco Waste-Away Service, Inc., by mail that the Himco refuse disposal operation should cease by December 31, 1974.

4. That a second letter, dated December 27, 1974, was sent to Mr. Himes granting an extension until March 1, 1975.

5. That the Himco Waste-Away Service, Inc., waives the right to notice of hearing and hearing before the Stream Pollution Control Board for the purpose of considering whether to approve this Stipulated Findings of Fact and Consent Agreement.

6. That the Himco Waste-Away Service, Inc., owns and operates a refuse disposal operation, hereafter known as Himco refuse disposal operation, consisting of approximately 21.75 acres in a part of the S1/2 of the NE1/4 of Sec. 36, T.38N., R4E., Cleveland Township, Elkhart County, Indiana.

7. That said refuse disposal operation may be in violation of IC 1971, 13-7-4-1(c) and (f), and IC 1971, 19-2-1-3 and 19-2-1-31 in the following particulars;

(a) That on or about May 13, 1974, six water wells were determined to have been contaminated, which con-

tamination may have been caused by leachate generated from the Himco refuse disposal operation,. Himco paid for the deepening of each such well and no reports of further contamination since said date have been received.

(b) That the practice of disposing of certain types of industrial and municipal wastes at the Himco refuse disposal operation has been determined to be a potential hazard in that contamination of the groundwater supply in this area may result due to the particular geological characteristics on site.

(c) That the Himco refuse disposal operation has not been approved by the Stream Pollution Control Board of the State Board of Health for the disposal of refuse.

8. That the efforts of Himco Waste-Away Service, Inc., to find and obtain necessary approvals for a new landfill site have not yet resulted in obtaining a new site for relocation of the Himco refuse disposal operation.

9. There is a substantial need in the Elkhart community for refuse disposal facilities.

10. Himco Waste-Away Service, Inc., should be given a reasonable period of time to effect a relocation of its refuse disposal operation site while continuing the present site in operation under specific restrictions, contingent upon Himco making reasonable and prompt progress toward the acquisition, approval and commencement of operation of a new site.

IT IS RECOMMENDED THAT THE STREAM POLLUTION CONTROL BOARD OF THE STATE OF INDIANA adopt the following consent agreement:

1. That the Himco Waste-Away Service may continue the Himco refuse disposal service operation at its present site until October 1, 1975, in accordance with the following conditions:

(a) That no municipal residential refuse, or any other wastes,. which include garbage or other highly putrescible wastes, be disposed of on-site.

(b) That no hazardous wastes as defined in Chapter II, Section 19, of the Indiana Stream Pollution Control Board Regulation SPC 18 be deposited.

(c) That no refuse other than those materials defined by Chapter IX, Section 1, Stream Pollution Control Board Regulation SPC 18, be deposited in wet areas.

(d) That all acceptable refuse shall be deposited in a single area and compacted and covered with a minimum of

six inches of soil on the day such refuse is delivered to the site.

(e) That the calcium sulfate waste be deposited only in a dry area.

(f) That any calcium sulphate deposited in a separate area, away from other refuse, shall not be stacked on an interim basis more than six (6) feet above proposed finish grade; no more than two (2) acres of said deposit shall be exposed at any given time; and not less than one (1) foot thickness of impermeable soil shall be applied as a final cover over the calcium sulphate deposit.

(g) That appropriate dust control measures be undertaken to the satisfaction of the Elkhart County Health Unit.

2. That the Himco Waste-Away Service, Inc., report to the Stream Pollution Control Board the following information no later than the dates indicated below:

(a) March 1, 1975 - A plot plan, to include final land surface contours and other information as described in Chapter III, Section 4(d)(iii) of Stream Pollution Control Board Regulation SPC 18.

(b) April 15, 1975 - Submittal of a progress report to indicate three (3) or more potential sites for a new sanitary landfill operation; further to indicate that necessary hauling equipment has been ordered. At this time representatives of the Board will be instructed to perform preliminary site surveys of the reported sites.

(c) May 15, 1975 - Evidence of ownership or purchase options of one or more sites for which sanitary landfill plans are to be submitted.

(d) August 1, 1975 - Evidence of proper zoning for one (1) or more sites discussed in item (c) above.

(e) August 15, 1975 - Complete construction plan permit application for the new sanitary landfill, as discussed in items (c) and (d) above, according to Chapter III, Section 2, Stream Pollution Control Board Regulation SPC 18.

(f) September 25, 1975 - Evidence that necessary additional hauling equipment, if any is required, has been obtained.

3. In the event Himco Waste-Away Service, Inc., exercises due diligence in taking all steps necessary for relocating its refuse disposal operation but shall be delayed by circumstances beyond its reasonable control

(as, for example, if governmental decisions on zoning approval shall require more than normal processing time) the Technical Secretary of the Stream Pollution Control Board shall be authorized to grant such extensions of time for operation of the existing refuse disposal operation as may be necessary to compensate for such unavoidable delays.

4. If this Stipulated Findings of Fact and Consent Agreement is not approved and adopted by the Stream Pollution Control Board, the same shall not be admissible against Himco Waste-Away Service, Inc., in any proceeding.

I have reviewed the above Stipulated Findings of Fact and Consent Agreement and agree to and approve the same.

Charles H. Himes, Jr.
Himco Waste-Away Service, Inc.

I have reviewed the above Stipulated Findings of Fact and Consent Agreement and recommend that the Stream Pollution Control Board adopt the same as its Findings of Fact and Final Agreement.

Roland P. Dove, Director
Division of Sanitary Engineering

February 18, 1975

VIA CERTIFIED MAIL

Mr. Charles H. Himes, Jr.
Himco Waste-Away Service
707 North Wildwood Avenue
Elkhart, Indiana 46514

Dear Mr. Himes:

Re: Consent Agreement
Himco Disposal Operation
Elkhart County

Enclosed is an executed copy of the Recommended Consent Agreement signed by you and returned to this Board. The Stream Pollution Control Board adopted the order at its meeting on the 18th day of February, 1975.

Very truly yours,

Oral H. Hert
Technical Secretary

EWO/mc
cc: Mr. Franklin Breckenridge
Mr. Charles Whistler
Hearing Commissioner's Office
Elkhart County Health Unit

January 28, 1975

VIA CERTIFIED MAIL

Charles L. Whistler, Attorney
810 Fletcher Trust Building
Indianapolis, Indiana 46206

Dear Mr. Whistler:

Re: Himco Dump
Elkhart County

Enclosed are two copiesof the proposed consent agreement which has been briefly discussed with you. Please consult with Mr. Himes and advise us of the suitability of the draft.

Since Mr. Himes is now faced with a March 1, 1975, closure date for the subject operation, we urge you to contact the Solid Waste Management Section staff at 633-6400 immediately. The signed consent agreement must be returned by February 14, so that the Board can consider the matter at its February 18, 1975, meeting.

Very truly yours,

Roland P. Dove, Director
Division of Sanitary Engineering
AC 317/633-4330

RPD/mc
Enclosure

PROPOSED NARRATIVE SUMMARY
COUNTY ROAD 10 LANDFILL
ELKHART, INDIANA

The C.R. 10 Landfill site covers approximately 40 acres at the Northwest corner of the intersection of County Road 10 and the Nappanee Street Extension, in Elkhart County, Indiana. The site is currently located partially within the corporate limits of the City of Elkhart, and partially in the unincorporated area of Elkhart County. The privately owned site was operated between 1960, and September, 1976, by Mr. Charles Himes, Sr.. Portions of the area were excavated to a depth of 10 feet and together with a marshy area were filled with general refuse and medical and pharmaceutical wastes. Industrial solid wastes, (non-domestic, non-hazardous solid wastes primarily consisting of paper and wood products) may also have been deposited, according to the transporter and a report prepared by the Indiana Department of Natural Resources and the Elkhart Water Works.

The total amount of any hazardous wastes landfilled at the site is unknown. Representatives of the Environmental Protection Agency detected cobalt, selenium, beryllium, cadmium, copper, manganese and other metals in monitering wells in the area. These results corroborated an analysis of residential shallow wells conducted in 1974, by the State, which showed high manganese levels.

EXHIBIT D

The site is located above a continuous portion of the shallow, or upper, aquifer system that together with the lower, or deep, aquifer serves as the sole source of drinking water for the community. While shallow wells at some residences in the immediate area may be effected, almost the entire population of the City as well as many outlying areas have service available from the municipally owned Elkhart City Water System which remains unaffected by the site.

In response to a suggestion of the Indiana State Health Commissioner, Himco Waste-Away Services, Inc., the primary transporter of solid waste to the site voluntarily drilled deep wells to replace six contaminated shallow residential wells in the immediate areas of the site in 1974. These deep wells remedied the contamination problem for the residents in the immediate areas who are not on the City Water System.

In 1975, Himco Waste-Away Services, Inc. entered into a Consent Agreement (adopted by the Indiana Stream Pollution Control Board) that resulted in the closing of the site in September, 1976. As part of the closure proceedings and in accordance with the Consent Agreement virtually all of the site was covered with a layer of calcium sulfate approximately 24 inches deep, and much of the site was then covered with sandy top soil and seeded. During a site inspection the Environmental Protection Agency representatives observed

several streams of leachate and isolated spots of stressed vegetation. The maximum height of the landfill was about 15 feet above the original ground level at the center of the site and sloped to 5 feet at the edges of the landfill.

0425P

STATE OF INDIANA

STATE BOARD OF HEALTH

AN EQUAL OPPORTUNITY EMPLOYER

INDIANAPOLIS

Address Reply to:
Indiana State Board of Health
1330 West Michigan Street
P. O. Box 1964
Indianapolis, IN 46206

September 4, 1984

Mr. Thomas Wilson
Elkhart County Health Department
2400 Elkhart Road
Goshen, IN 46526

Dear Mr. Wilson:

Re: Construction of Buildings on the
Himco Dump Site in Elkhart, Indiana
Elkhart County

This is written in reference to our telephone conversation on August 23, 1984, in which you requested additional information concerning the problems which may occur if construction takes place on the old Himco Landfill site in Elkhart, Indiana.

Please be advised that even if concrete floor (slab type) construction is used, methane gas may still seep into buildings constructed on the slab through cracks which may develop in the slab. Also, methane gas may seep into these structures through poorly sealed drainage pipes. In addition, all of the concerns identified in the previous letter to you would still apply.

Therefore, we still strongly recommend that this site not be used for construction of buildings of any type.

If you have any further questions concerning this matter, please feel free to call me at AC 317/243-9100.

Very truly yours,

SCM

Stuart C. Miller, Chief
Facility Inspection Section
Solid Waste Management Branch
Division of Land Pollution Control

DMB/tr
32467

EXHIBIT E

STATE OF INDIANA

STATE BOARD OF HEALTH

AN EQUAL OPPORTUNITY EMPLOYER

INDIANAPOLIS

Address Reply to:
Indiana State Board of Health
1330 West Michigan Street
P. O. Box 1964
Indianapolis, IN 46206-1964

AUG 14 1984

Mr. Thomas Wilson
Elkhart County Health Department
2400 Elkhart Road
Goshen, IN 46526

Dear Mr. Wilson:

Re: Residential Construction on the
Himco Dump Site in Elkhart, Indiana
Elkhart County

This is in reference to your recent inquiry to our office regarding the suitability of using the old Himco Dump Site in Elkhart for the construction of residential housing.

Please be advised that this use of the site would be illsuited for the following reasons:

1. The possibility of ground settling on the site, which would result in foundation problems for houses being constructed on unstable soil.

2. The possibility of methane gas being generated at the site, which may seep into housing built on the site and cause a possible explosion.

3. The possibility of toxic materials, which have already contaminated nearby wells, causing additional problems if excavated on-site and brought to the surface.

4. The disturbance of the integrity of the clay cover soil cap by construction would cause additional infiltration of water into the fill area, which would cause additional methane gas and leachate to be generated at the site.

5. The installation of septic systems would greatly increase the production of methane gas and leachate at the site.

6. Some of the toxic materials deposited at the site may cause general environmental problems for people living in housing developed on this site.

It is for the above reasons that we would strongly recommend that residential construction not take place on this site.

If you have any further questions concerning this matter, please call me at AC 317/243-9100.

Very truly yours,

SCM

Stuart C. Miller, Chief
Facility Inspection Section
Solid Waste Management Branch
Division of Land Pollution Control

DMB/tr

Citation 55 FR 7507-01 | Rank(R) R 3 OF 3 | Database FR | Mode P

PROPOSED RULES

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 300

[FRL 3728-3]

National Priorities List for Uncontrolled Hazardous Waste Sites; Deletion of a Site

Friday, March 2, 1990

AGENCY: Environmental Protection Agency.

ACTION: Notice of intent to **delete** sites; request for comments.

SUMMARY: The Environmental Protection Agency (EPA) announces its intent to **delete** the **Reeser's Landfill** Site from the National Priorities List (NPL) and requests public comment. As specified in Appendix B of the National Oil and Hazardous Substances Contingency Plan (NCP), which the EPA promulgated pursuant to section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), it has been determined that all Fund-financed responses under CERCLA have been implemented. EPA, in consultation with the Commonwealth of Pennsylvania, has determined that no cleanup is appropriate. The purpose of this notice is to request public comment on the intent of EPA to **delete** the **Reeser's Landfill** Site.

DATES: Comments may be submitted on or before April 1, 1990.

ADDRESSES: Comments may be mailed to Victor Janosik, Remedial Project Manager, Superfund Branch, (3HW22), Environmental Protection Agency, 841 Chestnut Street, Philadelphia, PA 19107. For background information on the site, contact Victor Janosik at the above address.

The Deletion Docket is available for inspection Monday through Friday at the following locations and times:

U.S. EPA Region III, Hazardous Waste Management Division, 841 Chestnut Street, Philadelphia, PA 19107 from 9:00 am to 5:00 pm.

Parkland Community Library, 4422 Walbert Avenue, Allentown, PA 18104 from 9:00 am to 5:00 m.

FOR FURTHER INFORMATION CONTACT:Victor Janosik (215) 597-8996.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Introduction

The Environmental Protection Agency (EPA) Region III announces its intent to delete a site from the National Priorities List (NPL), Appendix B, of the National Oil and Hazardous Substances Contingency Plan (NPL), and requests comments on this deletion. The EPA identifies sites that appear to present a significant risk to human health or the environment and maintains the NPL as the list of those sites. Sites on the NPL may be remediated using the Hazardous Substances Superfund. Any sites deleted from the NPL remain eligible for Fund-financed remedial actions in the unlikely event that conditions at the site warrant such action.

EPA plans to **delete** the **Reeser's Landfill** Site in Upper Macungie Township, Lehigh County, Pennsylvania from the NPL.

The EPA will accept comments on this site for thirty days after publication of this notice in the Federal Register.

Section II of this notice explains the criteria for deleting sites from the NPL. Section III discusses procedures that the EPA is using for this action. Section IV discusses the Reeser's Landfill Site and explains how the site meets the deletion criteria.

II. NPL Deletion Criteria

Amendments to the NCP published in the Federal Register on November 20, 1985, (50 FR 47912) establish the criteria the Agency uses to delete sites from the NPL. Section 300.66(c)(7) of the NCP provides that.

Sites may be deleted from or recategorized on the NPL where no further response is appropriate. In making this determination, EPA will consider whether any of the following criteria have been met.:

(i) EPA, in consultation with the State, has determined that responsible or other parties have implemented all appropriate response actions required:

(ii) All appropirate Fund-financed response under CERCLA has been implemented, and EPA, in consultation with the State, has determined that no further cleanup by responsible parties is appropriate; or

(iii) Based on a remedial investigation, EPA, in consultation with the State, has determined that the release poses no significant threat to public health or the environment and, therefore, taking of remedial measures is not appropriate.

Before deciding to delete a site, EPA will make a determination that the remedy, or decision that no remedy is necessary, is protective of human health and the environment, consistent with section 121(d) of the Superfund Amendments and Reauthorization Act (SARA) of 1986.

Deletion of a site from the NPL does not preclude eligibility for subsequent Fund-financed actions if future conditions warrant such action. Section 300.66(c)(8) of the NCP provides that Fund-financed actions may be taken at

sites that have been deleted from the NPL.

III. Deletion Procedures

In the NPL rulemaking published on October 15, 1984 (49 FR 40320), the Agency solicited and received comments on whether the notice of comment procedures followed for adding sites to the NPL should also be used before sites are deleted. Comments were also received in response to the amendments to the NCP proposed on February 12, 1985 (50 FR 5862).

Deletion of a site from the NPL does not itself create, alter, or revoke any individual rights or obligations. The NPL is designed primarily for information purposes and to assist Agency management. As mentioned in Section II of this notice, s 300.66(c)(8) of the NCP states that deletion of a site from the NPL does not prelcude eligibility for future Fund-financed response actions.

For deletion of this site, EPA's Regional Office will accept and evaluate public comments before making the final decision to delete.

A deletion occurs when the Regional Administrator places a notice in the Federal Register, and the NPL will reflect those deletions in the next final update. Public notices and copies of the Responsiveness Summary will be made available to local residents by the Regional Office.

IV. Basis for Intended Site Deletion

The following site summary provides the Agency's rationale for the intention to **delete** this site from the NPL.

Reeser's Landfill Site, Upper Macungie Township, Pennsylvania

The **Reeser's Landfill** is located in Upper Macungie Township, Lehigh County, Pennsylvania, immediately east of the village of Haafsville and approximately 5 miles west of the City of Allentown. The approximately 15-acre site is the location of a non-operating landfill which had been operated by Edward F. Reeser of Reeser's Hauling Service. The landfill reportedly received many types of wastes from approximately 1970-1980 but no record of types and quantities was kept.

Residents in the immediate area of the landfill use ground water as their potable water source. In addition, the Lehigh County Authority operates a municipal well (LCA 6) less than 2000 feet east of the site. Runoff water from the landfill has the potential to reach Iron Run, a small stream which functions as the primary surface water drainage way for the area. Concern for adverse impacts on the area ground water and on Iron Run is the reason that the site was included on the National Priorities List (NPL) in July 1987.

In August 1983, EPA Region III conducted the Preliminary Assessment/Site Inspection (PA/SI) of the Reeser's Landfill. The PA/SI found slightly elevated levels of lead (Pb) and cadmium (Cd) in an abandoned well near the site, and slightly elevated mercury (Hg) concentrations in Iron Run and in a leachate seep on the landfill. Based on the results of the PA/SI, the site received a Hazard Ranking Score (HRS) of 30.35. A Remedial Investigation and Feasibility Study (RI/FS) of the site was authorized by EPA in April 1987. The field work

for the RI was conducted in the fall of 1987 and the winter of 1988. The overall objective of the RI was to collect information needed to evaluate actual and potential risks to receptors from exposure to site-related contamination in soil, surface water, and ground water. The RI was conducted in one phase of field activities lasting approximately six months that included:

- Geophysical survey.
- Landfill test pits and sampling.
- Onsite and offsite surface soil and surface water sampling.
- Completion of seven additional onsite and offsite soil borings.
- Analysis of water samples from nine private water supply wells and the LCA 6 well.
- Completion of an aquifer pumping test.
- Development of an endangerment assessment based on the results of the RI program.

The endangerment assessment has shown that no carcinogenic effects which might be attributed to the landfill would produce an exposure greater than 8x10-8. Also, no scenario involving human exposure to the site would result in a Hazard Index of 1 or greater. The site is not contributing to any significant environmental degradation.

On March 30, 1989, the Acting Regional Administrator for EPA Region III approved a Record of Decision (ROD) which selected the No Action alternative for the Reeser's Landfill. That ROD also specifies that a review of the condition of the area ground water will be conducted within five years.

The No Action alternative is protective of both human health and the environment. All potential pathways were examined in order to make this determination. No direct contact threat exists from the site soils or from ground water. The Reeser's Landfill has not adversely impacted Iron Run, the receptor stream, as evidenced by the presence of similar contaminant levels upstream and downstream from the site.

EPA's decision to delete this site from the NPL and to perform one subsequent review of ground water is not inconsistent with CERCLA 121(c) or with the 5-year review/deletion recommendation in the Administrator's "A Management Review of the Superfund Program" (Management Review)(p.7). CERCLA 121(c) does not require reviews of sites for which no remedial actions are selected, but it does not preclude performance of reviews wherever appropriate at NPL sites. The Management Review stated that EPA would revise its deletion policy so that no site where hazardous substances remain would be deleted before performance of at least one 5-year review to confirm the protectiveness of the remedy.

The "No-action" alternative was selected for this site because no remedial action is required to ensure protection of human health and the environment, thus deletion of the site from the NPL is appropriate. The Commonwealth of Pennsylvania has concurred on this deletion.

Dated: February 5, 1990.

Stanley Laskowski,

Acting Regional Administrator, Region III.

Citation 54 FR 39009-01 | FOUND DOCUMENT | Database FR | Mode P

PROPOSED RULES

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 300

[SW-FRL 3648-1]

National Oil and Hazardous Substances Contingency Plan; The National Priorities List; Request for Comments

Friday, September 22, 1989

AGENCY: Environmental Protection Agency.

ACTION: Notice of intent to delete a site from the National Priorities List; request for comments.

SUMMARY: The Environmental Protection Agency (EPA) announces its intent to delete the International Minerals & Chemical Corp. (Terre Haute East Plant) site (IMC), from the National Priorities List (NPL) and requests public comment. The NPL is Appendix B to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which EPA promulgated pursuant to section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended. This action is being taken by EPA, because it has been determined that all Funds financed response under CERCLA have been implemented, and EPA in consultation with the State, has determined that no further cleanup is appropriate. The intention of this notice is to request public comment on the intent of EPA to delete the IMC site.

DATE: Comments concerning the proposed deletion of the site from the NPL may be submitted until October 23, 1989.

ADDRESSES: Comments may be mailed to Nan Gowda (5HS-11), Remedial Project Manager, Office of Superfund, U.S. EPA, Region V, 230 S. Dearborn St., Chicago, IL 60604. The comprehensive information on the site is available at the local information repositories located at: Vigo County Library, One Library Square, Terre Haute, IN 47807; and the Vigo County Health Deparment, 201 Cherry, Terre Haute, IN 47807. Request for comprehensive copies of documents should be directed formally to the appropriate Regional Docket Office. Address for the Regional Docket Office is C. Feeeman (5HS-12), Region V, U.S. EPA, 230 South Dearborn Street, Chicago, IL 60604, (312) 886-6214.

FOR FURTHER INFORMATION CONTACT:Nan Gowda (5HS-11), U.S. EPA, Region V, Office of Superfund, 230 South Dearborn Street, Chicago, Illinois, 60604, (312) 353-9236; or Art Gasior (5PA-14), Office of Public Affairs, U.S. EPA, Region V, 230 South Dearborn Street, Chicago, Illinois, 60604, (312) 886-6128.

SUPPLEMENTARY INFORMATION:

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I. Introduction

The U.S. Environmental Protection Agency (EPA) announces its intent to delete the IMC site from the National Priorities List (NPL), Appendix B, of the National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR part 300 (NCP), and requests comments on the deletion. The EPA identifies sites that appear to present a significant risk to public health, welfare or the environment, and maintains the NPL as the list of those sites. Sites on the NPL may be the subject of Superfund (Fund) Fund-financed remedial actions. Any site deleted from the NPL remains eligible for additional Fund-financed remedial actions in the unlikely event that conditions at the site warrant such action.

The EPA will accept comments on this proposal for 30 days after publication of this notice in the Federal Register.

Section II of this notice explans the criteria for deleting sites from the NPL. Section III discusses procedures that EPA is using for this action. Section IV discusses the history of this site and explains how the site meets the deletion criteria.

The Agency believes it is appropriate to review all sites being considered or proposed for deletion from the NPL, including the site being noticed today, to determine whether the requirement for a five-year review (under CERCLA section 121(c)) applies. This is consistent with the intent of the statement in the Administrator's Management Review of the Superfund Program (the "90-day Study"), that "EPA will modify Agency policy so that no site, where hazardous substances remain, will be deleted from the NPL until at least one five year review is conducted and the review indicates that the remedy remains protective of human health and the environment." EPA will shortly issue its policy on when and how five-year review sites may be deleted from the NPL. This policy may have an effect on the timing of site deletions proposed in this and other notices.

II. NPL Deletion Criteria

The 1985 amendments to the NCP established the criteria the Agency uses to delete sites from the NPL, 40 CFR 300.66(c)(7), provide that sites "may be deleted or recategorized on the NPL where no further response is appropriate." In making this decision, EPA will consider whether any of the following criteria have been met:

(i) EPA, in consultation with the State, has determined that responsible or other parties have implemented all appropriate response actions required;

(ii) All appropriate Fund-financed responses under CERCLA have been

implemented, and EPA, in consultation with the State, has determined that no further cleanup by responsible parties is appropriate.

(iii) Based on a remedial investigation, EPA, in consultation with the State, has determined that the release poses no significant threat to public health or the environment and, therefore, taking of remedial measures is not appropriate.

Prior to deciding to delete a site from the NPL, EPA must determine that the remedy, or existing site conditions at sites where no action is required, is protective of public health, welfare, and the environment.

Deletion of a site from the NPL does not preclude eligibility for subsequent additional Fund-financed actions if future site conditions warrant such actions. Section 300.68(c)(8) of the NCP states that Fund-financed actions may be taken at sites that have been deleted from the NPL.

Deletion of sites from the NPL does not itself create, alter, revoke any individual's rights or obligations. Furthermore, deletion from the NPL does not in any way alter EPA's right to take enforcement actions, as appropriate. The NPL is designed primarily for informational purposes and to assist in Agency management.

III. Deletion Procedures

Upon determination that at least one of the criteria described in s 300.66(c)(7) has been met, EPA may formally begin deletion procedures. The first steps are the preparation of a Superfund Close Out Report and the establishment of the local information repository and the Regional deletion docket. These actions have been completed. This Federal Register notice, and a concurrent notice in the local newspaper in the vicinity of the site, announce the initiation of a 30-day public comment period. The public is asked to comment on EPA's intention to delete the site from the NPL; all critical documents needed to evaluate EPA's decision are generally included in the information repository and deletion docket.

Upon completion of the public comment period, the EPA Regional Office will prepare a Responsiveness Summary to evaluate and address concerns which were raised. The public is welcome to contact the EPA Regional Office to obtain a copy of this responsiveness summary, when available. If EPA still determines that deletion from the NPL is appropriate, a final notice of deletion will be published in the Federal Register. However, it is not until the next official NPL rulemaking that the site would be actually deleted.

IV. Basis for Intended Site Deletion

The following summary provides the Agency's rationale for intending to delete the Site from the NPL.

The IMC East Plant Site in southeastern Terre Haute, Indiana, is located in Vigo County, approximately 1.8 miles east of the Wabash River. The plant site has an area of approximately 37 acres. From 1946 to 1954, manufacturing, packing, and warehousing of technical grade benzene hexachloride (BHC-tech) occurred on a six-acre segment of this property. As a result of these operations, the site soils and groundwater became contaminated with BHC residues. Confirmed contamination of the groundwater is the reason that the site was proposed for inclusion on the NPL on October 15, 1984, and later made

final on the NPL in June 1986.

Beginning in 1979, surface and core sampling/analysis were conducted by IMC to determine the extent of contaminated soil. In addition, monitoring wells were installed to determine potential impacts to the groundwater.

In 1980, IMC removed 18,500 cubic yards of contaminated materials. These materials were placed in an on-site mound above the elevation of the highest groundwater level, and secured by a clay cap. Excavation was carried out in all areas until soil samples contained less than 50 ppm BHC. The mound was encircled with a concrete drainage ditch, which diverts runoff water away from the edge of the mound toward a gravel infiltration area to the south. This disposal mound is surrounded by a security fence. Monitoring wells upstream and downstream of the mound have been sampled and analyzed quarterly since 1981. Contamination concentrations in the downgradient wells have decreased with time.

In August 1986, IMC and U.S. EPA signed an Administrative Order by Consent, in the matter of the IMC East Plant Site, to conduct a Remedial Investigation and Feasibility Study (RI/FS). In entering into this Consent Order, the mutual objectives of EPA and IMC were: (1) To determine fully the nature and extent of the threat to the public health or welfare or the environment caused by the release or threatened release of hazardous substances into the environment from the East Plant site; and (2) to evaluate alternatives for the appropriate remedial action to prevent or mitigate the migration or the release or threatened release of hazardous substances from the Site, which includes evaluation of past remediation at the site and to evaluate the need for and appropriate extent of additional remedial action, if any.

As part of the RI/FS, a risk assessment was conducted. The purpose of the risk assessment was to determine the present or future potential adverse effects of the Site on public health and the environment. This assessment lead to the identification of the BHC in the groundwater. Groundwater was sampled and analyzed for BHC. One of the isomers of BHC, known as "gamma" isomer, or lindane, is a priority pollutant. Lindane was detected in groundwater immediately downgradient of the disposal mound during the RI. Contamination levels are lower than the Maximum Contaminant Level (MCL) confirmed by the body of data accumulated during quarterly monitoring program.

The data also show that these low levels of lindane are declining and are well below the Maximum Contaminate Level Goal (MCLG) of 0.2 ppb. All other groundwater sampling locations, on and off-site, showed no detectable lindane. The levels of lindane detected in soil were well below the 50 ppb target cleanup values established and implemented in 1980.

On June 22, 1988, the Regional Administrator of U.S. EPA Region V, approved a Record of Decision which selected the No Action alternative (monitoring and maintenance of existing system) as the preferred remedy for the IMC East Plant Site. This remedy includes periodic monitoring of groundwater, fence maintenance, and long-term maintenance of the cover system. All materials, including the soil disposed of in the clay-capped mound, would be left in place.

As part of the No Action remedy, the IMC Corporation, present owner of the IMC East Plant Site, will continue to monitor the groundwater semi-annually for the next 5 years and annually thereafter; maintain cap and site security; and, maintain deed restrictions on the site land use. There will be a performance

and maintenance review every 5 years with U.S. EPA.

Concentrations of lindane in the groundwater declined relatively quickly after the construction of the mound, and has continued to decline since early 1983. Groundwater cleanup has occurred to MCLG levels, and contaminant concentrations continue to decline. The capping systems, fence, ground cover and monitoring program are reliable systems for prevention of contamination migration. Because the monitoring points are close to the mound, and because current groundwater contaminant levels are well below drinking water standards, early detection is possible, and no impact on downgradient groundwater users is anticipated.

The public health is further protected by the 5-year review of the selected remedy, as required by section 121(b)(2)(c) of SARA. Under the No Action scenario, contaminants would remain on-site, requiring review of the remedy at least every 5 years to assure protection of human health and the environment. If action under section 104 or 106 is appropriate, such action will be taken at that time.

The capping system, fencing, and ground cover are already in place and have proven effective over the past seven years of the record. Deed restrictions will state that no private use of this site will be permitted for the 30-year period. Therefore, the site remediation objectives, with respect to public health and environmental impacts, have been attained.

EPA, with the concurrence of the Indiana Department of Environmental Management, has determined that all appropriate Fund-financed responses under CERCLA at the IMC site have been completed, and no further cleanup by the responsible parties is appropriate.

Dated: September 7, 1989.

Frank M. Covington,

Acting Regional Administrator.

[FR Doc. 89-22076 Filed 9-21-89; 8:45 am]

BILLING CODE 6560-50-M

54 FR 39009-01

END OF DOCUMENT

40 CFR Parts 268 and 271

[FRL-4514-9]

Land Disposal Restrictions "No Migration" Variances

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule and notice of availability; extension of comment period.

SUMMARY: The Environmental Protection Agency (EPA or Agency) is extending the comment period on the proposed land disposal restrictions "no migration" variances rule, which appeared in the Federal Register on August 11, 1992 (see 57 FR 35940). This extension of the comment period is provided to allow commenters an opportunity to complete their review and responses to the Agency's proposed rule.

DATES: EPA will accept public comments on the proposed rule and notice of availability until October 23, 1992. Comments postmarked after the close of the extended comment period will be stamped "late."

ADDRESSES: Comments should be addressed to the docket clerk at the following address: U.S. Environmental Protection Agency, RCRA Docket (Room 2427) (OS-305), 401 M Street, SW., Washington, DC 20460. One original and two copies should be sent and identified at the top by regulatory docket reference number F-92-NMVP-FFFFF. The Docket is open from 9 a.m. to 4 p.m., Monday through Friday, excluding Federal holidays. The public must make an appointment to review docket materials, and should call the docket clerk at (202) 260-9327 for appointments. The public may copy, at no cost, a maximum of hundred pages of material from any one regulatory docket. Additional copies are $0.15 per page.

Copies of the guidance manual for no migration petitioners can be obtained from the National Technical Information Service (NTIS), U.S. Department of Commerce, Springfield, Virginia 22161, at (703) 487-4600: No Migration Guidance (NTIS PB92-207 695).

FOR FURTHER INFORMATION CONTACT: For general information about this proposed rulemaking, contact the RCRA Hotline, Office of Solid Waste (OS-305), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460, (800) 424-9346 (tollfree) or (703) 920-9810 in the Washington, DC, metropolitan area.

For information on aspects of this proposed rule pertaining to No Migration, contact Dave Reeves, Office of Solid Waste (OS-343), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460, (202) 260-4692.

For information on aspects of this proposed rule pertaining to control of organic air emissions from no migration units under RCRA Section 3004(n), contact Kent C. Hustvedt, Office of Air Quality Planning and Standards (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, 27711, (919) 541-5395.

SUPPLEMENTARY INFORMATION: On August 11, 1992, EPA proposed its interpretation of the "no migration" variance to the Congressional mandated restrictions on land disposal of hazardous waste. In addition, EPA proposed procedural and substantive requirements for petitioning the Agency and demonstrating that there will be "no migration" from a land disposal unit. Also, the Agency proposed standards that would limit organic air emissions from land treatment, landfill, and waste pile units for those petitioners that have successfully demonstrated "no migration" and have received a variance from restrictions on land disposal of hazardous waste. Finally, in this proposed notice, the Agency announced the availability of a draft guidance manual for petitioners seeking to make no migration demonstration, entitled No Migration Variances to the Hazardous Waste Land Disposal Prohibitions: A Guidance Manual for Petitioners (U.S. EPA, Draft, July 1992). These actions are in response to amendments to the Resource Conservation and Recovery Act (RCRA), enacted through the Hazardous and Solid Waste Amendments of 1984 (HSWA). See 57 FR 35940 for a more detailed explanation of the Agency's proposal.

Since publication, the Agency has received a request from several commenters to extend the comment period because additional time is needed to review the proposed rule and the guidance document. The Agency considered the request and has decided to extend the comment period for 30 days to allow the commenters additional time to review the proposed rule. The public comment period for the proposed rule was originally scheduled to end on September 25, 1992. Today's notice extends the public comment period for the proposed rule to allow commenters an opportunity to finalize their review and responses to the Agency's proposed rulemaking.

Dated: September 23, 1992.

Richard J. Guimond,

Acting Assistant Administrator, Office of Solid Waste and Emergency Response (OSWER).

[FR Doc. 92-23600 Filed 9-25-92; 8:45 am]

BILLING CODE 6560-50-M

40 CFR Part 300

[FRL-4512-6]

National Oil and Hazardous Substances Pollution Contingency Plan; National Priorities List

AGENCY: Environmental Protection Agency.

ACTION: Notice of intent to delete the Suffern Village Well Field Site from the National Priorities List: Request for comments.

SUMMARY: The Environmental Protection Agency (EPA) Region II announces its intent to delete the Suffern Village Well Field site (Site) from the National Priorities List (NPL) and requests public comment on this action. The NPL is Appendix B of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which EPA promulgated pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended. EPA and the State of New York have determined that no further cleanup by responsible parties is appropriate under CERCLA. Moreover, EPA and the State have determined that CERCLA activities conducted at the Site to date have been protective of public health, welfare, and the environment.

DATES: Comments concerning this Site may be submitted on or before October 30, 1992.

ADDRESSES: Comments may be mailed to: Ms. Kathleen C. Callahan, Director, Emergency and Remedial Response Division, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, Room 737, New York, New York 10278.

Comprehensive information on this Site is contained in the EPA Region II public docket, which is located at EPA's Region II office, and is available for viewing, by appointment only, from 9 a.m. to 5 p.m., Monday through Friday, excluding holidays. To request an appointment to review the public docket, please contact: Mr. Richard Kaplan, Remedial Project Manager, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, Room 2930, New York, New York 10278, (212) 264-3819.

EXHIBIT H

Background information from the Regional public docket is also available for viewing at the Site's Administrative Record repositories located at: Suffern Free Library, Maple and Washington, Suffern, New York 10901 and Suffern Village Town Hall, 61 Washington Avenue, Suffern, New York 10901.

FOR FURTHER INFORMATION CONTACT: Mr. Richard Kaplan at (212) 264-3819.

SUPPLEMENTARY INFORMATION:

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I. Introduction

EPA Region II announces its intent to delete the Site from the NPL and requests public comment on this action. The NPL constitutes Appendix B to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which EPA promulgated pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended. EPA identifies sites that appear to present a significant risk to public health, welfare, or the environment and maintains the NPL as the list of those sites. Sites on the NPL may be the subject of remedial actions financed by the Hazardous Substances Superfund Response Trust Fund (FUND). Pursuant to § 300.425(e)(3) of the NCP, any site deleted from the NPL remains eligible for Fund-financed remedial actions, if conditions at the Site warrant such action.

EPA will accept comments concerning this Site for thirty (30) days (or until October 30, 1992) after publication of this notice in the Federal Register.

Section II of this notice explains the criteria for deleting sites from the NPL. Section III discusses procedures that EPA is using for this action. Section IV discusses how the Site meets the deletion criteria.

II. NPL Deletion Criteria

The NCP establishes the criteria that the Agency uses to delete sites from the NPL. In accordance with 40 CFR 300.425 (e), sites may be deleted from the NPL where no further response is appropriate. In making this determination, EPA will consider whether any of the following criteria has been met:

(i) EPA, in consultation with the State, has determined that responsible or other parties have implemented all appropriate response actions required; or

(ii) All appropriate Fund-financed responses under CERCLA have been implemented and EPA, in consultation with the State, has determined that no further cleanup by responsible parties is appropriate; or

(iii) Based on a remedial investigation, EPA, in consultation with the State, has determined that the release poses no significant threat to public health or to the environment and, therefore, taking remedial measures is not appropriate.

III. Deletion Procedures

The NCP provides that EPA shall not delete a site from the NPL until the State in which the release was located has concurred, and the public has been afforded an opportunity to comment on the proposed deletion. Deletion of a site from the NPL does not affect responsible party liability or impede agency efforts to recover costs associated with response efforts. The NPL is designed primarily for informational purposes and to assist Agency management.

EPA Region II will accept and evaluate public comments before making a final decision to delete. The Agency believes that deletion procedures should focus on notice and comment at the local level. Comments from the local community may be most pertinent to deletion decisions. The following procedures were used for the intended deletion of the Site:

1. EPA Region II has recommended deletion and has prepared the relevant documents. EPA has also made all relevant documents available in the Regional office and local site information repositories.
2. The State of New York has concurred with the deletion decision.
3. Concurrent with this national Notice of Intent to Delete, a notice has been published in local newspapers and has been distributed to appropriate Federal, State and local officials, and other interested parties. This notice announces a thirty (30) day public comment period on the deletion package starting on September 30, 1992 and concluding on October 30, 1992.

The comments received during the comment period will be evaluated before any final decision is made. EPA Region II will prepare a Responsiveness Summary which will address the comments received during the public comment period.

If after consideration of these comments, EPA decides to proceed with deletion, the EPA Regional Administrator will place a Notice of Deletion in the Federal Register. The NPL will reflect any deletions in the next final update. Public notices and copies of the Responsiveness Summary will be made available to local residents by Region II.

IV. Basis for Intended Site Deletion

The Suffern Village Well Field Site is located in the Town of Ramapo, approximately 0.25 miles north of the New York-New Jersey border in Rockland County, New York. The Site includes a municipal water supply well field operated by the Village of Suffern, and a facility (Tempcon Corp.), approximately 2500 feet from the Well Field, from which hazardous substances were released or threatened to be released.

The Village operates four production wells that supply water at an average of approximately 1.8 million gallons per day. Recharge to the wells is derived principally from induced infiltration of water from the Ramapo River. Volatile organic contamination of the Well Field was first detected in tap water collected from the municipal distribution system in September 1978. Subsequent monitoring activities by the village, the Rockland County Department of Health (RCDOH) and the New York State Department of Environmental Conservation (NYSDEC), confirmed that ground water had become contaminated with 1,1,1-trichloroethane (TCEA), a volatile organic compound (VOC). Three of the Village's wells, with TCEA levels ranging from 90 to 114 parts per billion (ppb), were shut down in December 1978. Water supply requirements were provided by the remaining well which had TCEA levels significantly below the New York State Department of Health (NYSDOH) guideline of 50 ppb. (This guideline was revised to a standard of 5 ppb in January 1989).

In December 1978, RCDOH tentatively identified Tempcon Corp., a small oil burner reconditioning business, as a user of TCEA and a potential source of the TCEA contamination. In January 1979, Tempcon Corp. ceased disposing of TCEA into a seepage disposal pit located on its property and stopped using TCEA-based cleaning products. In March 1979, at the direction of RCDOH, Tempcon Corp. performed remedial measures including the removal of waste materials from its disposal pit and the excavation and devolatilization of contaminated soils. The Village constructed a spray aeration treatment system later that year to remove TCEA from the municipal water supply.

The system was operated until early 1985, when monitoring results indicated that TCEA levels were within the NYSDOH guideline of 50 ppb;

subsequently, TCEA concentrations remained below the guideline with only occasional excursions.

The Site was proposed for the NPL on October 10, 1984, and placed on the NPL on June 1, 1986. In March 1985, EPA entered into a cooperative agreement with New York State, which provided for the performance of an RI/FS by NYSDEC at the Site. In April 1986, DEC retained ERM-Northeast to perform this work.

The scope of the RI field work included extensive sampling of ground water, surface water, sediment, surface soil and ambient air. Analyses for metals, other inorganic, semivolatiles, and VOCs other than TCEA indicated that these substances were not a threat to human health or the environment. The only pathway of concern was ground water, bearing TCEA and degradation products, migrating southward from the Tempcon Facility and the E-well location (a monitoring well approximately 700 ft. southeast of Tempcon.)

A Feasibility Study was conducted during which a solute transport model (the "Suffern Aquifer Model") was developed to predict contaminant concentration profiles as a function of time.

The EPA community relations activities at the Site included a public meeting on August 19, 1987 to present the results of the RI/FS, and the preferred alternative. Public comments were received and addressed.

The Record of Decision (ROD) dated September 25, 1987 selected a "No Action" alternative based on the conclusion that contaminant levels had been naturally attenuating and the Suffern Aquifer Model predicted continued decreases in contaminant level down to approximately 1 ppb within 10 years and below 5 ppb within 4 years. A two-year monitoring program was planned to confirm the validity of the No Action alternative and to verify the predicted results of the Suffern Aquifer Model, as well as to ensure that the remedy was protective of human health and the environment.

Suffern Village installed a granular activated carbon adsorption unit and a maganese filtration unit to its existing water system, which as been in operation since the spring of 1990. This was necessitated by the revised January 1989 NYSDOH standard for TCEA concentrations in public water supplies of 5 ppb.

The first-year monitoring program was concluded in October 1990, and a report was issued in May 1991. After thorough review of the results, NYSDEC and EPA determined that the magnitude of the ROD monitoring program was not warranted, and decided to modify the program. This determination was based on the fact that the contaminant plume is attenuating, and the GAC system installed by Suffern Village has virtually eliminated the population's exposure to the low concentrations of TCEA present in the groundwater. NYSDEC prepared a Long-Term Monitoring Plan, dated October 9, 1991 with which EPA concurs.

The first-year ground water monitoring program has met the objectives set forth in the ROD. Water analyses indicate that the contaminant plume is attenuating, and support the conclusions of the Suffern Aquifer Model predictions. Further, the low levels of contamination in the production wells are below State drinking-water standards due to the recently installed GAC treatment system.

Having met the deletion criteria, EPA proposes to delete this site from the NPL. EPA and the State have determined that the response actions are protective of human health and the environment.

Dated: September 11, 1992.

Constantine Sidamon-Eristoff,

Regional Administrator.

[FR Doc. 92-23453 Filed 9-25-92; 8:45 am]

BILLING CODE 6560-50-M

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

43 CFR Part 3160

[WO-610-4111-02-24 1A]

RIN 1004-AB72

Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; Onshore Oil and Gas Order No. 1, Approval of Operations; Reopening of Public Comment Period

AGENCY: Bureau of Land Management, Interior.

ACTION: Proposed rule; Reopening of public comment period.

SUMMARY: A proposed rule that would revise Onshore Oil and Gas Order No. 1 was published on July 23, 1992 (57 FR 32756). The public comment period expired on September 21, 1992. The Order provides the requirements necessary for the approval of all proposed oil and gas exploratory, development, or service wells on all Federal and Indian (except the Osage Tribe) onshore oil and gas leases. It also covers most approvals necessary for subsequent well operations, including abandonment. These approvals are granted by the Bureau of Land Management (BLM). The comment period is being reopened to provide the public additional time to comment on this important Order, which is fundamental to all oil and gas exploration and development.

DATES: Comments should be submitted by October 28, 1992. Comments received or postmarked after this date may not be considered in the decision process of the final rulemaking.

ADDRESSES: Comments should be sent to: Director (140), Bureau of Land Management, room 5555, Main Interior Building, 1849 C Street, NW., Washington, DC 20240. Comments will be available for public review at this address during regular business hours (7:45 a.m. to 4:15 p.m.), Monday through Friday (excepting Federal holidays).

FOR FURTHER INFORMATION CONTACT: Lynn E. Rust, (307) 772-2293, or Erick Kaarlela, (202) 653-2127.

Richard Roldan,

Deputy Assistant Secretary of the Interior.

[FR Doc. 92-23487 Filed 9-25-92; 8:45 am]

BILLING CODE 4310-84-M

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[MM Docket No. 92-214, RM-8062]

Radio Broadcasting Services; Columbia and Bourbon, MO

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: This document requests comments on a petition filed by The Greenfield Group proposing the substitution of Channel 244C1 for Channel 244C3 at Columbia, Missouri, and modification of the construction permit for Station KCMQ(FM) to specify operation on Channel 244C1. The coordinates for Channel 244C1 are 38-37-40 and 92-07-00. To accommodate Channel 244C1 at Columbia, we shall propose to substitute Channel 297A for vacant Channel 244A at Bourbon, Missouri, or in the alternative, delete the channel at Bourbon if no applications are filed for Channel 244A and no interest is expressed in Channel 297A during the comment cycle in this proceeding. The coordinates for Channel 297A at Bourbon are 38-08-30 and 91-16-00. There is a site restriction 2.6

United States Environmental Protection Agency Region I

Office of External Programs John F. Kennedy Federal Building Boston, Massachusetts 02203

Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont

EPA Environmental News

For more information call

Jim Sebastian, Community Relations, 617/565-3423
Eric van Gestel, Project Manager, 617/573-5726

For Immediate Release
September 30, 1992

EPA ISSUES FINAL DECISION FOR REVERE TEXTILE SUPERFUND SITE

BOSTON - The U.S. Environmental Protection Agency today signed a Record of Decision for the Revere Textile Prints Corporation Superfund hazardous waste site. The "no action" decision concludes that the low levels of contaminants which remain on the site will not require cleanup measures.

"Today's decision brings to a close a major chapter in the life of the Revere site," said Julie Belaga, EPA Regional Administrator. "Our studies confirm that earlier cleanup work at the site was a success. We are now confidant that, based on EPA criteria, the site no longer poses a threat to the community and we have a monitoring program in place just to make sure."

The Record of Decision marks the end of a two year study into the nature and extent of contamination at the Revere site. The Remedial Investigation which began in 1990 included sampling of site soil, sediments, air, and ground water, and also testing of surface water such as the Moosup River. EPA found limited contamination in certain areas of the site, but not enough to cause a significant risk to human health or the environment.

Some of the contaminants found on the site during the Remedial Investigation include volatile organic compounds, heavy metals, and pesticides. In signing the Record of Decision, EPA assumes that the site will be developed for industrial or commercial purposes. Under this scenario, contamination at the site would not result in an unacceptable risk. Also included in the final decision is a five year ground water monitoring program to ensure that contaminant levels do not increase. If for some reason monitoring were to indicate a change in site conditions, future cleanup work would be possible.

-more-

EXHIBIT I

EPA proposed the no action alternative in August and held a thirty day public commment period to accept comments on the plan. Copies of the Record of Decision along with responses to public comments are available in the Sterling Public Library in Oneco, Connecticut and in the EPA Records Center in Boston.

The Revere Textile Superfund site is located in the center of Sterling, CT at the intersection of Route 14 and Main Street. The former textile mill operated from 1879 until March 1980 when a fire destroyed most of the buildings. The mill used a variety of pigments, paints and solvents to dye and clean textiles. In 1987, EPA added the site to the National Priorities List, making it eligible for federal action under the Superfund law.

Over 1500 drums of hazardous substances stored on the site were removed in 1983, along with a some contaminated soil. The possibility of residual contamination from these drums in area soil and ground water prompted EPA to continue investigations at the site. The Sterling municipal well, located across the Moosup River from the site, has shown no signs of site related contamination and will be included in routine testing to ensure protection of human health and the environment.

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Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont

EPA Environmental News

For more information call Jim Sebastian, Community Relations, 617/565-3423
Eric van Gestel, Site Manager, 617/573-5726

August 20, 1992

EPA PROPOSES NO ACTION REMEDY FOR THE REVERE TEXTILE SUPERFUND SITE

BOSTON - U.S. Environmental Protection Agency today proposed that no action be taken to address the Revere Textile Prints Superfund site in Sterling, Connecticut.

An extensive two-year Remedial Investigation uncovered only very small amounts of contamination at the site, amounts that do not pose a threat to human health or the environment. Periodic monitoring will be necessary to ensure that area ground water remains safe.

"Only after many months of careful study were we able to conclude that the Revere site does not pose a risk to the community," said Julie Belaga, EPA Regional Administrator. "We will, however, keep an eye on the site for the next five years to ensure that conditions do not change. Our decision also means that the site can be put to productive use once again."

EPA will conduct a public comment period to accept public comments on the No-Action alternative. The comment period will run from August 21 to September 19, 1992. EPA will also hold a public hearing on September 2 at 7:30 pm at the Robert P. Jordan Community Center in Sterling to discuss the proposal and accept public comments. Those interested in commenting on the No-Action alternative, which is summarized in the Proposed Plan, should send comments, postmarked no later than September 19 to Eric van Gestel, HEC-CAN 6, U.S. EPA, JFK Federal Building, Boston, MA 02203. Copies of the Proposed Plan along with the Remedial Investigation and all other site documents can be found at the Sterling Public Library in Oneco, Connecticut or the EPA Records Center in Boston.

Some of the contaminants found on the site during the Remedial Investigation include volatile organic compomds, heavy metals, and pesticides. In proposing the No Action alternative, EPA assumes that the site will be developed for industrial or commercial purposes. Under this scenario, contamination at the site would not result in an unacceptable risk.

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The Revere Textile Superfund site is located in the center of Sterling, CT at the intersection of Route 14 and Church Street. The former textile mill operated from 1879 until March 1980 when a fire destroyed most of the buildings. The mill used a variety of pigments, paints and solvents to dye and clean textiles. In 1987, EPA added the site to the National Priorities List, making it eligible for federal action under the Superfund law.

Over 1500 drums of hazardous substances stored on the site were removed in 1983, along with a some contaminated soil. The possibility of residual contamination from these drums in area soil and ground water prompted EPA to continue investigations at the site. The Sterling municipal well, located across the Moosup River from the site, has shown no signs of site related contamination.

The Remedial Investigation which began in September of 1990 sampled soil, ground water, surface water and sediment in the site area, as well as mill buildings and roads. Results indicate the low levels of contamination found on-site was at or below the safe levels set by the federal government.

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EPA Region I
Superfund Program
Revere Textile Prints Site
Sterling, Connecticut

August 1992

Proposed Plan

EPA Proposes a No Action Plan for the Revere Textile Prints Site

The U.S. Environmental Protection Agency (EPA) is proposing No Action, other than monitoring, at the Revere Textile Prints Superfund* Site in Sterling, Connecticut. This document, known as the Proposed Plan, describes EPA's No Action alternative for addressing the lack of significant contamination at the Revere Textile Prints Site. In accordance with Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), EPA is providing an opportunity for public review and comment on this Proposed Plan. EPA will consider public comments as part of the final decision-making process for selecting the No Action alternative for the site.

The No Action alternative would involve monitoring of the ground water at the property and regular reviews of site activities to assure protection of human health and the environment. This is necessary to verify that unacceptable contaminant exposures will not occur in the future. Under the No Action alternative, no treatment or containment measures would occur and no effort would be made to restrict access to the site. The No Action alternative is described in greater detail on page 14 of this document.

This Proposed Plan:

1. explains the opportunities for the public to comment on EPA's No Action alternative;
2. includes a brief history of the site and the principal findings and conclusions of the site investigations;
3. provides a brief description of the No Action alternative; and
4. presents EPA's rationale for its preliminary selection of the No Action alternative.

*Note: Words that appear in bold print in this document are defined in the glossary on pages 17 through 19.

To help the public participate in reviewing the No Action preferred alternative for the site, this document also includes information about where interested citizens can find more detailed descriptions of the site investigations and risk analysis for the Revere Textile Prints Site.

The Public's Role in Evaluating Remedial Alternatives

Public Comment Period

EPA is conducting a 30-day public comment period from August 21 through September 19, 1992, to provide an opportunity for public involvement in the final cleanup decision. During the comment period, the public is invited to review this Proposed Plan, the Remedial Investigation (RI) report, and the RI addendum, which provide information on the site investigation findings, and to offer comments to EPA.

Public Informational Meeting and Hearing

EPA will hold a public informational meeting and hearing on Wednesday, September 2, 1992 at 7:30 p.m. at the Robert P. Jordan Community Center, located at 50 Main Street in Sterling, Connecticut to describe the No Action alternative. The public is encouraged to attend the meeting to hear the presentations and to ask questions.

This hearing will provide the opportunity for people to comment verbally on the No Action alternative after they have reviewed this Proposed Plan. Comments made at the hearing will be transcribed, and a copy of the transcript will be added to the site Administrative Record available at the EPA Records Center at 90 Canal St. in Boston, MA, and at the information repository location listed on page 3.

Written Comments

If, after reviewing the information on the site, you would like to comment in writing on EPA's preferred alternative or other issues relevant to the site, please deliver your comments to EPA at the Public Informational Meeting and Hearing or mail your written comments (postmarked no later than September 19, 1992) to:

Eric van Gestel, Remedial Project Manager
U.S. Environmental Protection Agency
Waste Management Division (HEC-CAN6)
JFK Federal Building
Boston, MA 02203-1911
(617) 573-5726

EPA's Review of Public Comment

EPA will review comments received from the public as part of the process of reaching a final decision on the No Action preferred alternative for the Revere Textile

Prints site. EPA's final decision will be included in a **Record of Decision (ROD)** for the site. A document, called a Responsiveness Summary, which summarizes EPA's responses to comments received during the public comment period will be issued with the ROD. Once the ROD is signed by the EPA Regional Administrator, it will become part of the Administrative Record, containing documents used by EPA to choose the appropriate remedy for the site.

Additional Public Information

Because this Proposed Plan provides only a brief summary of the investigation of the Revere Textile Prints Site and the No Action preferred alternative, the public is encouraged to consult the Administrative Record, which contains the Remedial Investigation report and other site documents.

The Administrative Record is available for review at the following locations:

EPA Records Center
90 Canal Street, 1st Floor
Boston, Massachusetts 02114
(617) 573-5729
Hours:
Monday-Friday: 10:00 a.m. to 1:00 p.m. and 2:00 p.m. to 5:00 p.m.

Sterling Public Library
1110 Plainfield Pike
Oneco, Connecticut 06373
(203) 564-2692
Hours:
Tuesday: 10:00 a.m. - 4:30 p.m. and 6:00 pm. - 8:00 p.m.; Thursday: 1:30 p.m. - 8:00 p.m.; Saturday: 10:00 a.m. - 3:00 p.m.

Site History

The Revere Textile Prints Superfund Site covers approximately 15 acres in the Town of Sterling, Connecticut, and is situated at the intersection of Route 14 and Main Street. The Moosup River and the Sterling Pond are situated respectively southwest and southeast of the site (see Figure 1). Three spillway channels allow Sterling Pond overflow to merge into the Moosup River downstream of the site. Another channel diverts water from the Sterling Pond underground through a man-made raceway which passes through the former industrial plant property and back into the Moosup River (see Figure 2).

The site has long been used for industrial purposes and was originally a cotton mill operated by various owners from 1809 to 1879. The first dyeing of cotton began in 1879 with operations conducted by the Sterling Dyeing and Finishing Company. Since then, Revere has had several textile processing facilities located on site, including the Sterling Dyeing and Finishing Company from 1904-1954, the Moosup

Figure 1.

Revere Textile Prints Site Location Map

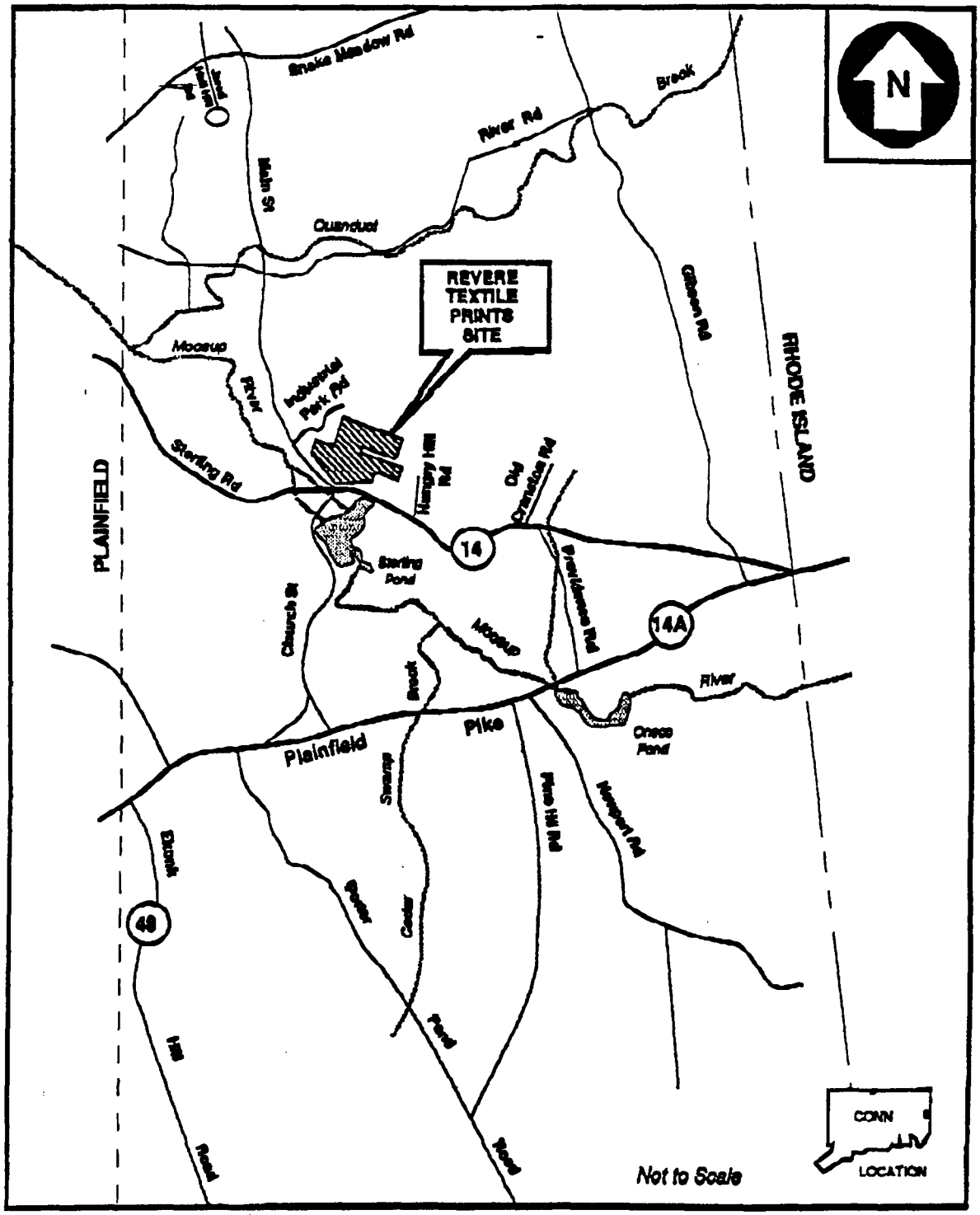
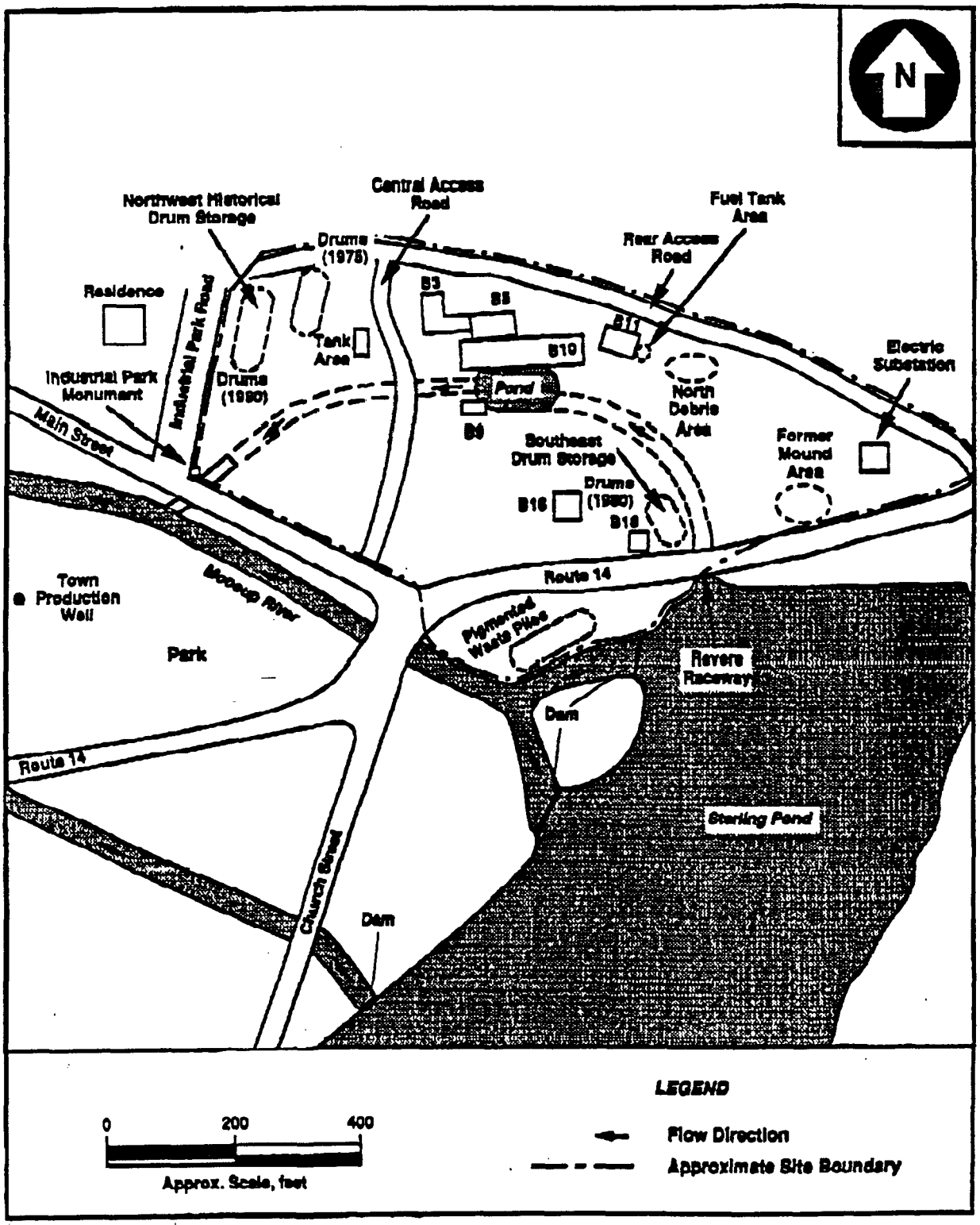


Figure 2.

Revere Textile Prints Site Map



Finishing Corporation from 1959-1960, and the Revere Textile Prints Corporation from 1966-1980. Pigments, dyes, and solvents were used at each of the textile firms to print various colors and patterns on fabrics until March 1980 when a fire destroyed operations at the facility.

The fire did not destroy all of the buildings at the site. Kenneth Lynch bought the Revere Textile site in 1981, then sold it to W.F. Norman Company in 1982-1983. The W.F. Norman Company used the site for metal stamping operations and then abandoned operations at the site. Currently, the buildings at the site are in very poor shape. The Town of Sterling acquired the Revere Textile site in October 1988 and is the current owner of the property. The Town plans for the site to remain within the Sterling Industrial Park.

Throughout the history of dyeing operations at the facility, process rinse water and leftover printing pigments were reportedly disposed down floor drains of the Revere facility and into the Moosup River. Many residents reportedly observed the dumping or observed the colored effects of the dumping of waste dyes into the Moosup River. In 1978, after an order was issued from the Connecticut Department of Environmental Protection (CTDEP) to drastically reduce the organic color levels being discharged directly into the Moosup River, the Revere Textile Prints Company apparently began drumming the wastes and having them shipped off site for treatment/disposal. The Revere Textile Print Company began storing large quantities of the wastes on site after their contracted drum hauler went out of business.

After the fire in 1980, an inspection of the site in September 1980 by the CTDEP revealed that over 1,500 drums of waste material remained at the site. The inspection revealed waste-containing drums spread out over the entire site, and not placed specifically in waste storage areas. Some drums were lying horizontally and evidence of soil staining was apparent. A November 1980 inspection by CTDEP personnel revealed that the drums were eventually gathered and organized in two of the on-site buildings. Figure 2 identifies the historical drum storage areas and waste material piles.

During the period that the drums were on site, the property did not have adequate security measures and several drums leaked as a result of vandalism. As stated previously, visual inspection of the site showed evidence of stained /colored soils located by the former drum storage areas and also pigmented waste piles by the fill area of the raceway channel and across Route 14 in the pile area.

EPA involvement with the site commenced after the discovery of the drum storage on site. In 1987, the site was placed on EPA's **National Priorities List** (NPL) of hazardous waste sites, making it eligible for federal funding for investigation and cleanup. The drum storage area as well as certain historical waste disposal areas on site, including the on-site raceway and the Moosup River, have the potential to have been affected by the historical site waste disposal activities. Therefore, EPA determined that contamination might reside in the ground water, surface water, soils

and sediments connected with the historical waste disposal and storage areas of the site.

Several sampling events were conducted in an effort to determine whether significant levels of contamination still existed in the soils, sediments, surface water, and ground water, and to identify the contents of the remaining drums. The results of these sampling events led to the initiation and subsequent completion of EPA's remedial investigation in 1992.

Removal Activities to Date

In September 1980, CTDEP ordered Kenneth Lynch to remove the drums remaining on site. In 1983, Kenneth Lynch hired Environmental Waste Removal (EWR) to remove approximately 1,500 drums from the site. At the same time, an unspecified amount of stained soils were removed for off-site disposal. The CTDEP inspected the site following the removal and found that all of the drums had been removed. Although most contaminated soil was removed, stained soils and sludge piles remained on site in material fill areas and around the drum storage areas.

In 1989, EPA found several 55-gallon drums and 5-gallon cans containing liquid waste material, located in and around the remaining site buildings. The drums were sampled in June 1989. On May 31, 1990, EPA issued a unilateral administrative order to the Town of Sterling to remove and dispose of the remaining drums off-site. The Town of Sterling performed the removal and disposal in 1991.

Results of the Remedial Investigation (RI)

A Remedial Investigation (RI) was conducted to define the nature and extent of any contamination remaining at the site. Field activities included the collection and analysis of samples of ground water, soil, sediment, surface water, and air. The results of these analyses indicate that there are no areas of contamination at the site which pose a significant current risk to human health and the environment. The findings of the field activities are summarized below and in Table 1.

1. *Ground Water Quality:* Ground water flow in the Revere Textile Prints Site area takes place in both overburden and bedrock aquifers. The results of ground water sampling indicate that concentrations of contaminants moving through the aquifer are low and do not exceed Maximum Contaminant Levels (MCLs) for drinking water. Ground water samples were obtained on three separate occasions (Phase I, Phase II, and Phase III), as discussed below. Ground water monitoring locations are shown in Figure 3. All ground water quality data are for unfiltered samples, in accordance with Region I guidance for samples used for public health risk determinations.

TABLE 1. SUMMARY OF REMEDIAL INVESTIGATION RESULTS

Contaminant/ Media	Metals	VOCs	BNAs	Pesticides/PCBs
Soils	Insignificant levels	Insignificant levels	Significant levels*	Insignificant levels
Ground Water	Insignificant levels	Insignificant levels	Insignificant levels	None detected
Town Supply Well	Insignificant levels	None detected	None detected	None detected
Air	N/A	Insignificant levels	N/A	N/A
Surface Water	Insignificant levels	None detected	None detected	None detected
Sediments	Insignificant levels**	Insignificant levels	Insignificant levels**	Insignificant levels

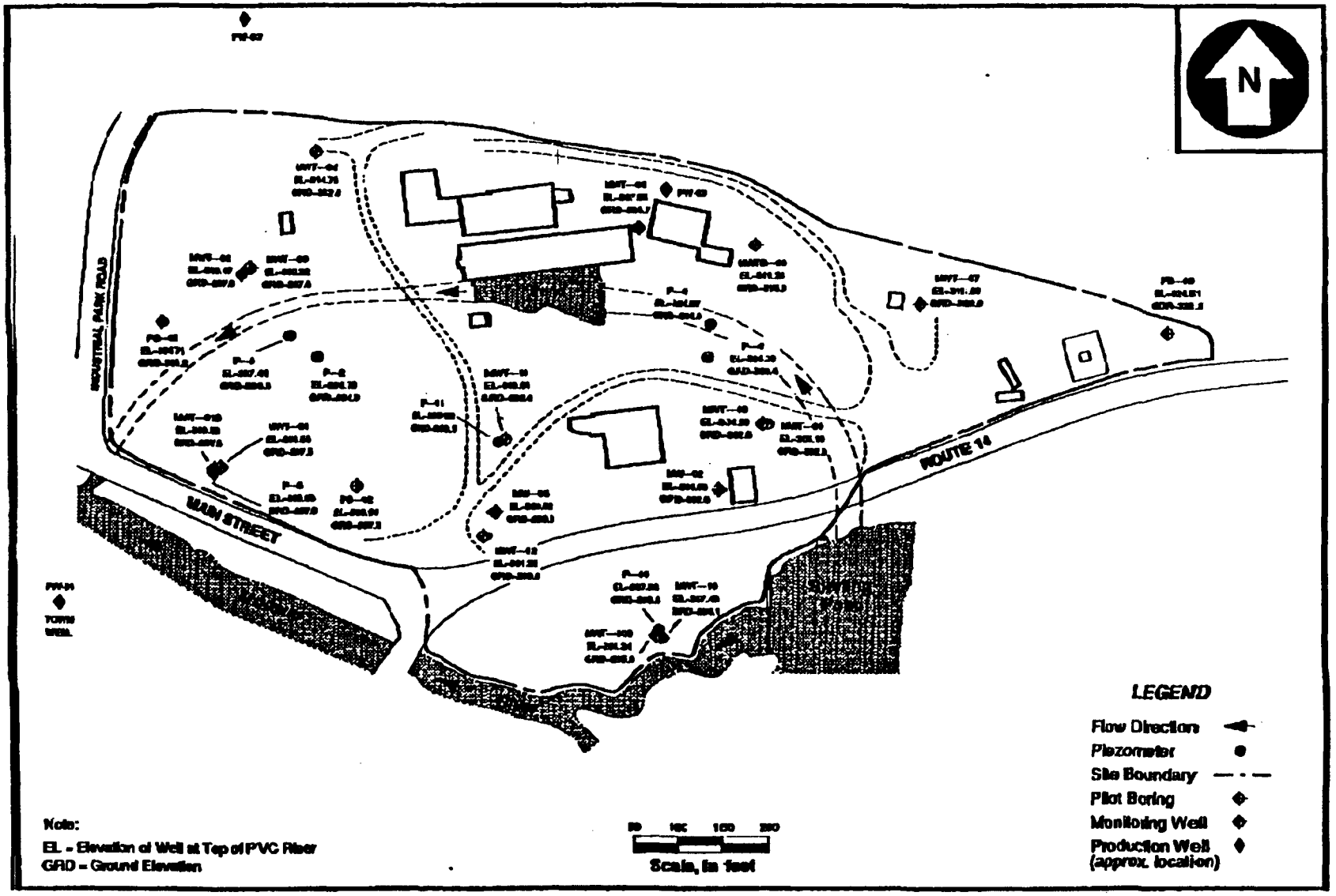
VOCs - volatile organic compounds
BNAs - Base/neutral and acid extractable organic compounds
PCBs - polychlorinated biphenyls
N/A - not applicable/not tested

*While tests indicated significant levels of BNA contamination in certain areas of the site, the average level over the entire site resulted in risks estimated to be within the EPA acceptable risk range.

**While tests indicated elevated concentrations of metals and BNAs in certain areas of the site, results from biological assay testing indicated that no significant biological effects are associated with these sediment concentrations.

Figure 3.

Revere Textile Prints Site Groundwater Monitoring Locations



Phase I Ground Water Sampling:

Ground water samples were collected on site from 14 overburden monitoring wells and three bedrock wells installed during Phase I, two existing overburden monitoring wells, an existing onsite bedrock production well, an old public supply source, and the town supply well. All water samples were analyzed for volatile organic compounds (VOCs), base-neutral and acid extractable organic compounds (BNAs), pesticides, polychlorinated biphenyls (PCBs), metals, cyanide, and physical characteristics. Well PB-03 and ground water source area PW-02 are considered to be representative of background conditions. (Note: Phase I BNA and pesticide/PCB data were rejected due to exceedence of sample holding times.)

Phase II Ground Water Sampling:

During Phase II, ground water samples were collected again from all wells discussed above. All samples were analyzed for the same parameters as in the Phase I round.

Phase III Low Extraction Rate Ground Water Sampling Round:

High concentrations of aluminum and iron (which are not priority metal contaminants) in Phase I and II data suggested that those water samples contained appreciable levels of particulate matter. Particulates, if not part of the matter moving with ground water, may bias the results of metal analysis. This bias can lead to an over estimation of concentrations and imply exceedences of MCLs where in fact there are none. EPA directed a third sampling phase using a peristaltic pump rather than a bailer for purging and sampling of all the wells. Purging and sampling of the wells was performed at low extraction rates until turbidity stabilized. Then an unfiltered water sample was taken for metals analysis. This procedure was used in order to limit the artificial entrainment of particulates which can occur if the well is overstressed during a bailing operation.

Ground Water Sampling Results:

None of the sampled wells had organic compound concentrations above MCLs. All concentrations were near or below detection limits. MWT-01S showed trace concentrations; MWT-08 showed a low concentration of 2-butanone. None of the monitoring wells showed any detectable concentrations of VOCs during the Phase II sampling round.

BNAs were detected in four monitoring wells, with only two of the wells showing very low but quantifiable concentrations. No pesticides or PCBs were detected in the wells sampled at the site. No BNAs, pesticides, or PCBs were detected in the town water supply samples.

results in Section 5.3.1 of that report and in the December 1991 Technical Directive Memorandum.

Numerous BNAs, primarily polynuclear aromatic hydrocarbons (PAHs), were identified in the surface and subsurface soils. Low PAH concentrations were distributed throughout the entire Revere Textile Prints site; however, concentrations were elevated in some areas.

A number of metals including lead, barium, copper, iron, and zinc are elevated above the highest reported background concentrations in certain localized areas of the site. Elevated concentrations of aluminum, beryllium, and manganese were found in soils at the Northwest Historical Drum Storage Area. The Southeast Drum Storage Area, the Rear and Central Access Roads, the Fuel Tank Area, and the Northern Building Perimeter Area all showed elevated concentrations of copper and/or lead. Chromium, magnesium, and nickel were found at elevated levels in the Pigmented Waste Pile and iron was found at elevated levels in the Former Mound Area. Arsenic was found at several locations.

The occurrences of elevated metals at these areas may be the result of pigments and dyes used at the site, and spills and/or leaks of materials during the movement of equipment and vehicles across the site or from drums stored on the property. The occurrence of vanadium at elevated levels along the Access Roads may be the result of fuel spills from vehicular movement.

Pesticide/PCB field screening results and laboratory analysis indicate that chlorinated pesticides are not widespread at the site. No PCBs were detected in the field screening or the laboratory analysis.

4. *Surface Water and Sediments:* Twelve surface water samples were collected from the on-site pond and raceway, Sterling Pond, and the Moosup River during the RI. (Phase I sampling locations are shown on Figure 4-10 of the RI Report. Phase II sampling locations appear on Figures 4-11 and 4-12 of the RI Report.) All surface water samples were analyzed for complete VOCs, BNAs, pesticides, PCBs, metals, cyanide, and physical characteristics.

Twenty-one sediment samples were collected from the water bodies located on and adjacent to the site during Phases I and II. Six sediment samples were collected during the most recent round of sampling completed in July 1992. These samples were used for a round of biological assay tests incorporating indigenous benthic organisms for analysis. All sediment samples contained greater than 30 percent solids to assure valid data. All the samples were analyzed for VOCs, BNAs, pesticides, PCBs, metals and cyanide.

No VOCs were detected in surface water at the Revere site. However, low-level VOC contamination is present in sediments at the site. Acetone and 2-butanone were most frequently detected while methylene chloride, toluene, and carbon disulfide were less pervasive.

No BNAs, pesticides, or PCBs were detected in the surface water at the site. However, BNAs are widely disributed across the site in sediments and were detected at all sampling locations during Phases I and II (Table 4-13 in the RI Report contains the analytical results of sediment BNA, pesticide, and PCB analysis). Only four pesticides were detected and all concentrations were at or near detection levels.

With the exception of one sampling location, no metals were detected in surface water at concentrations above those typically occurring naturally. In sediments, only copper was detected at concentrations significantly exceeding background levels. Low levels of other metals were detected particularly from sediment samples collected downstream of the site.

The results of the biological assay testing indicate that no significant biological accumulation is occurring as a result of the concentrations of contaminants present in some sediments associated with the site.

5. *Air*: The results of the continuous and fenceline air monitoring during the intrusive activity at the site are negligible. The only significant sustained contamination readings were noted during the exploration of underground storage tanks (USTs) in the building depicted near grid location 7+50, 150 L in Figure 4-1 of the Draft RI Report. However, values obtained on soils quickly dissipated in the open air to nondetectable levels.

Summary of Site Risks

A baseline risk assessment was prepared in 1992 for the Revere site. The risk assessment focused on risks associated with current and potential future use of the site itself and areas immediately adjacent to the site. The quantitative public health risk assessment consisted of the following: hazard identification, exposure assessment, toxicity evaluation, and risk characterization.

The hazard identification step defined the contamination at the site and included the selection of contaminants of concern. The exposure assessment used available information on chemical releases from the site to estimate exposures to receptor populations. The toxicity evaluation described the toxicological effects to public health from exposure to each contaminant and summarized appropriate toxicity values. The risk characterization then estimated the carcinogenic and noncarcinogenic risks attributable to site-related contaminants, based on toxicity data and calculated exposure doses.

As outlined in the National Contingency Plan (NCP), the point of departure for acceptable risks at a Superfund site are those estimated cancer risks which result in a one in one million cancer risk. Risks up to one in ten thousand may be acceptable.

Based upon the evaluation of current exposure to contaminants at the site, all of the estimated maximum cancer risks are acceptable. The most probable current risk would result from soil ingestion or skin contact. EPA has calculated current cancer

risk to be approximately one in ten-thousand. Also, EPA has determined that, at present, contaminants found in surface/subsurface soils are not showing signs of mobility and are not affecting either the ground water underneath the site or the town municipal supply well located in the ball field across Main Street from the site.

EPA believes that in the future there is reasonable certainty that the site will continue to be used for industrial purposes and not residential purposes. Under an industrial use scenario, EPA has calculated the cancer risk for the most probable scenario, an excavation worker coming in contact with contaminated subsurface soils. The cancer risk was estimated to be three in one hundred thousand. This falls within EPA's acceptable risk range.

Although EPA's recommendation of No Action for the site is premised upon the site remaining industrial, EPA did calculate the risk to public health should the site be developed for residential purposes. If residential development were to occur in the future, a child could be exposed to subsurface soils brought to the surface during housing construction.. EPA calculated both the reasonable maximum and the average site risk under a future residential scenario. The average cancer risk for a child in a residential scenario (ingesting 200 milligrams of soil a day, 150 days per year, for a period of 6 years) was calculated to be approximately one in one-hundred-thousand. This falls within EPA's range of acceptable risk. The reasonable maximum cancer risk under the same scenario was calculated to be approximately nine in ten-thousand. This would fall outside EPA's range of acceptable risk.

Organic (Phases I and II) and inorganic (Phase III) contaminant data for ground water indicate that there is no significant present or potential future risk from ground water moving beneath the site. Contaminant transport from soils to ground water is a function of the adsorptive capacity of the soils and the physical and chemical characteristics of the site-related contaminants. In the case of Revere Textile Prints, concentrations of contaminants are unlikely to migrate beyond the uppermost soil depths or produce significant subsurface concentrations. Most BNAs are likely to remain bound to soils, particularly at the surface where soils exhibit high organic content. EPA believes that a future well installed in either of the aquifers is unlikely to have an impact on water quality that represents a risk to public health.

Finally, non-cancer adverse health effects are not likely at the Revere site. In addition, there was no identified risk to the environment. For a complete explanation of risks posed by contamination at the Revere site, please refer to Section 6.0 of the RI Report and the RI Report Addendum.

Description of No Action

No construction activities would be associated with the No Action decision. However, monitoring would be performed to provide information regarding the nature of ground water in the event that any changes should occur.

At a minimum, quarterly monitoring for the first year followed by semi-annual monitoring for the next four years would be performed to confirm that no unacceptable exposures will occur in the future. The need for additional monitoring wells would be examined. These plus a subset of the existing monitoring wells, and the public supply well, would be selected as ground water monitoring points. In addition, the ground water monitoring would provide a better understanding of rate of ground water flow. Due to the present low concentration of contaminants at the site, the analytical methods that would be used for ground water and surface water must be capable of achieving very low detection limits. In addition to the monitoring and consistent with CERCLA, the site would be reviewed at least once every five years to confirm that the decision to take no action remains protective.

Rationale for the No Action Decision

A No Action preferred alternative is being proposed by EPA because of the low cancer risk (as estimated in the baseline risk assessment). EPA has a mandate to manage risk resulting from actual or potential exposure to hazardous substances. EPA's decision as to whether action is warranted when the cancer risk range is not exceeded is based upon site specific conditions.

At the Revere Textile Prints site, there are very low levels of contaminants in the ground water, surface water, surface soils and sediments. The cancer risk that would result from current or future exposure to these contaminants would be well within EPA's acceptable risk range. The fact that the cancer risk that would result from exposure to all currently accessible areas of the site would be well within the acceptable risk range strongly contributed to the decision to recommend No Action.

In a residential scenario, the cancer risk associated with future exposure to subsurface soils directly beneath the site is outside of EPA's acceptable risk range. However, after reviewing site-specific information, EPA believes with reasonable certainty that the use of the site will remain industrial. Given this belief, EPA has estimated risk for an industrial scenario as falling within EPA's acceptable risk range. EPA is, therefore, specifically seeking comments on its determination that, with reasonable certainty, the site will continue to be used for industrial purposes.

It should be noted that there is always a measure of uncertainty in the characterization of any Superfund site. For this reason, EPA has provided for additional monitoring at the site in the form of sampling. EPA will evaluate the need for additional monitoring at the completion of the initial five years of monitoring. In addition, EPA, as part of the five year review, will ensure that the site continues to be used for industrial purposes.

EPA's decision does not mean that action under other regulations and statutes is not warranted. EPA has decided that the Superfund cleanup authority is not the appropriate mechanism to handle the removal and potentially necessary cleanup of contamination caused by underground storage tanks which remain on site. The State of Connecticut has authority to regulate the remediation of underground storage tanks

and contamination related to them. The State's authority under its laws is in no way limited by EPA's No Action decision. EPA encourages the State to take whatever action is appropriate to ensure further control of the underground storage tank issues with regard to the site.

EPA has the authority to revisit the No Action decision even if the site is removed from the NPL. This could occur if future conditions indicate that an unacceptable risk to human health or the environment would result from exposure to contaminants at the site.

For More Information

If you have any questions about the site or would like more information you may call or write to:

Eric van Gestel, Remedial Project Manager
U.S. Environmental Protection Agency
Waste Management Division (HEC-CAN 6)
JFK Federal Building
Boston, MA 02203
(617) 573-5726

OR

James Sebastian, Community Relations Coordinator
U.S. Environmental Protection Agency
Waste Management Division (RPS)
JFK Federal Building
Boston, MA 02203
(617) 565-3423

Glossary

Adsorptive Capacity: The degree to which a solid, such as soil, can take up and hold contaminants in the form of gases, dissolved substances, or liquids.

Ambient Water Quality Criteria: Concentration values of toxic pollutants in navigable waters that, based on available data, will not result in adverse impacts on important aquatic life or on consumers of such aquatic life.

Aquifer: A layer of rock or soil that can supply usable quantities of *ground water* to wells and springs. Aquifers can be a source of drinking water and provide water for other uses as well.

Artesian: A condition in which *ground water* is confined under enough pressure that, if tapped by a well, it will naturally rise above the water table and possibly above the land surface.

Baseline: With respect to the alternatives evaluated, a statement of existing conditions and their relative consequences should no further action be taken.

Base/Neutral and Acid Extractable Organic Compound (BNA): A type of *volatile organic compound* that is heavier in weight and that does not volatilize (or evaporate) as readily as other volatile organic compounds.

Bedrock: The layer of rock located below the glacially deposited soil and rock under the ground's surface. Bedrock can be either solid or fractured (cracked); fractured bedrock can support *aquifers.*

Benthic: A term used to describe organisms, such as plants or clams, that live on the bottom of a surface water body.

Biological Assay: An analysis and characterization of contaminated sediments or surface water, for example, to learn if adverse effects to an ecological community are associated with the contaminants.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A Federal law passed in 1980 and modified in 1986 by the *Superfund Amendments and Reauthorization Act (SARA).* The act created a special tax that goes into a Trust Fund, commonly known as *Superfund,* to investigate and clean up abandoned or uncontrolled hazardous waste sites. Under the program, EPA can either: 1) pay for site cleanup when parties responsible for the contamination cannot be located or are unwilling or unable to perform the work or 2) take legal action to force parties responsible for site contamination to clean up the site or pay back the Federal government for the cost of the cleanup.

Ground Water: Water found beneath the earth's surface that fills pores between materials such as sand, soil, gravel and cracks in *bedrock* and often serves as a principal source of drinking water.

Indigenous: A term used to describe an organism which is native to the location in which it is found.

Maximum Contaminant Levels (MCLs): The maximum permissible level of a contaminant in water that is consumed as drinking water. These levels are determined by EPA and are applicable to all public water supplies.

Maximum Contaminant Level Goal (MCLG): The maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on human health would occur, and which allows and adequate margin of safety.

National Contingency Plan (NCP): The major framework regulation for the federal hazardous substance response program. The NCP includes procedures and standards for how EPA, other federal agencies, states and private parties respond under the *Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)* to releases of hazardous substances.

National Priorities List (NPL): EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under *Superfund.*

One in One Million Cancer Risk: One person out of a population of one million would likely develop cancer as a result of exposure to site contaminants.

Overburden: Soil, gravel, or other surface material overlying *bedrock.*

Parts per Billion (ppb): A unit of measurement used to describe levels of contamination. For example, one gallon of a solvent in one billion gallons water is equal to one part per billion.

Permeability: The capacity of a porous rock, sediment, or soil to transmit water.

Peristaltic Pump: A pump system which draws liquid at rates which are slow enough to not disturb the turbidity of the *ground water,* and therefore, retrieve more true samples.

Polynuclear Aromatic Hydrocarbon (PAH): A type of organic compound that is a common component of fossil fuels. There are many different PAHs. Some PAHs are known to cause cancer. PAHs are also common in complete combustion products and are found in woodsmoke.

Record of Decision (ROD): A public document that explains the cleanup alternative to be used at a *National Priorities List* (NPL) site. The ROD is based on information and technical analysis generated during the RI/FS and on consideration of the public comments and community concerns.

Remedial Alternative: Option evaluated by EPA to address the source and/or migration of contaminants at a *Superfund* site to meet health based cleanup goals.

Remedial Investigation (RI): The Remedial Investigation determines the nature and extent of contamination at a hazardous waste site.

Risk Assessment: A qualitative or quantitative evaluation of human health and/or environmental risk resulting from exposure to a chemical or physical agent (pollutant); combines exposure assessment results with toxicity assessment results to estimate risk.

Sediments: The sand or mud found at the bottom and sides of bodies of water, such as creeks, rivers, streams, lakes, swamps, and ponds. Sediments typically consist of soil, silt, clay, plant matter, and sometimes gravel.

Source: Area at a hazardous waste site from which contamination originates.

Superfund: The common name given to the *Comprehensive Environmental Response, Compensation, and Liability Act* (1980) as amended by the *Superfund Amendments and Reauthorization Act* (1986).

Superfund Amendments and Reauthorization Act (SARA): Modifications to *CERCLA* enacted by Congress on October 17, 1986.

Surface Water: Bodies of water on the surface of the earth, such as rivers, lakes, and streams.

Turbidity: The reduced clarity of *ground water* or surface water caused by the suspension in the water of disturbed soil or *sediment*.

Volatile Organic Compound (VOC): A group of chemical compounds composed primarily of carbon and hydrogen that are characterized by their tendency to evaporate (or volatilize) into the air from water or soil. VOCs include substances that are contained in common solvents and cleaning fluids. Some VOCs are known to cause cancer.

Wetland: An area such as a marsh, bog, and swamp that is saturated with water long enough each year to affect the type of soil and vegetation found in the area. Wetlands are federally protected because they purify water, prevent floods, feed and shelter fish and wildlife, and offer recreational opportunities.

Mailing List Additions

If you or someone you know would like to be placed on the Revere Textile Prints Superfund Site mailing list, please fill out and mail this form to:

James Sebastian
Community Relations Coordinator
U.S. Environmental Protection Agency
Office of External Programs (RPS)
JFK Federal Building
Boston, Massachusetts 02203-2211
(617) 565-3423

Name: _____

Address: _____

Affiliation: _____ Phone: _____

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203
Forwarding and Address Correction Requested

Region I
Office of External Programs
John F. Kennedy Federal Building
Boston, MA 02203

Official Business
Penalty for Private Use
$300

First Class Mail
Postage and Fees Paid
EPA
Permit No. G-35

Richard Kupuscenski
Environ Corporation
4350 North Fairfax Drive
Arlington, VA 22203

Inside: Revere Textile Prints
Superfund Site Proposed Plan

Citation 54 FR 38876-01 | Rank(R) R 2 OF 2 | Database FR | Mode P

PROPOSED RULES

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 300

[SW-FRL-364,7-9]

National Oil and Hazardous Substance Contingency Plan; The National Priorities List

Thursday, September 21, 1989

AGENCY: Environmental Protection Agency.

ACTION: Notice of intent to delete site from the National Priorities List; request for comments.

SUMMARY: The Environmental Protection Agency (EPA) announces its intent to **delete** the Norman **Poer Farm** site form the National Priorities List (NPL) and requests public comment. The NPL is appendix B to the National Oil and Hazardous Substances Contingency Plan (NCP), which EPA promulgated pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA). This action is being taken by EPA, because it has been determined that all Fund financed response under CERCLA have been implemented and EPA, in consultation with the State, had determined that no further cleanup is appropriate. The intention of this notice is to request public comment on the intent of EPA to **delete** the Norman **Poer Farm** site.

DATE: Comments concerning the proposed deletion of site may be submitted until October 23, 1989.

ADDRESSES: Comments may be mailed to Margaret V. Pearce, Remedial Project Manager, U.S. EPA, Office of Superfund, 230 S. Dearborn St., Chicago, IL 60604. The comprehensive information on the site is available at your local information repository located at: Hancock County Health Department, Court House, 1st Floor, Greenfield, IN, 46140.

Request for comprehensive copies of documents should be directed formally to the appropriate Regional Docket Office. Address for the Regional Docket Office is C. Freeman (5HS-12), Region V, U.S. EPA, 230 S. Dearborn Street, Chicago, IL, 60604, (312) 886-6214.

FOR FURTHER INFORMATION CONTACT:Margaret V. Pearce, Region V, U.S. EPA, 230 South Dearborn Street, Chicago, IL, 60604, (312) 886-4747 or Art Gasior 5PA-14, Office of Public Affairs, Region V, U.S. EPA, 230 South Dearborn Street, Chicago, IL, 60604 (312) 886-6128.

SUPPLEMENTARY INFORMATION:

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I. Introduction

The Environmental Protection Agency (EPA) announces its intent to delete a site from the National Priorities List (NPL), appendix B, of the National Oil and Hazardous Substances Contingency Plan (NCP), and requests comments on the deletion. The EPA identifies sites that appear to present a significant risk to public health, welfare or the environment, and mainatins the NPL as the list of those sites. Sites on the NPL may be subject of Hazardous Superfund (Fund) financed remedial actions. Any sites deleted from the NPL remain eligible for Fund-financed remedial actions in the unlikely event that the conditions at the site warrant such action.

The site EPA intends to **delete** from the NPL is Norman **Poer Farm,** Charlottesville, Indiana.

The EPA will accept comments on the site for 30 days after publication of this notice in the Federal Register.

Section II of this notice explains the criteria for deleting sites from the NPL. Section III discusses procedures that EPA is using for this action, and those that the Agency is considering using for future site deletions. Section IV discusses the history of the site and explains how the site meets the deletion criteria.

The Agency believes it is appropriate to review all sites being considered or proposed for deletion from the NPL, including the site being noticed today, to determine whether the requirement for a five-year review (under CERCLA section 121(c)) applies. This is consistent with the intent of the statement in the Administrator's "Management Review of the Superfund Program" (the "90-day study"), that "EPA will modify Agency policy so that no site, where hazardous substances remain, will be deleted from the NPL until at least one five year review is conducted and the review indicates that the remedy remains protective of human health and the environment." EPA will shortly issue its policy on when and how five-year review sites may be deleted from the NPL. This policy may have an effect on the timing of site deletions proposed in this and other notices.

II. NPL Deletion Criteria

The 1985 Amendments to the NCP establish the criteria the Agency uses to delete sites form the NPL. The NCP (40 CFR 300.66 (c)(7)) provides that sites "may be deleted from or recategorized on the NPL where no further response is appropriate." In making this determination, EPA will consider whether any of the following criteria has been met:

(i) EPA, in consultation with the State, has determined that responsible or

other parties have implemented all appropriate response actions required.
(ii) All appropriate Fund-Financed responses under CERCIA have been implemented; and EPA, in consultation with the State, has determined that no further cleanup by responsible parties is appropriate.
(iii) Based on a remedial investigation, EPA, in consultation with the State, has determined that the release poses no significant threat to public health or the environment and, therefore, taking of remedial measures is not appropriate.
Before deciding to delete a site, EPA must make a determination that the remedy, or existing site conditions at sites where no action is required, is protective of public health, welfare, and the environment.
Deletion of the site from the NPL does not preclude eligibility for subsequent Fund-financed actions, if future conditions warrant such actions. Section 300.66(c)(8) of the NCP states that Fund-financed actions may be taken at sites that have been deleted from the NPL.
Deletion of sites from the NPL does not itself create, alter, or revoke any individual's rights or obligations. Furthermore, deletion from the NPL does not in any way alter EPA's right to take enforcement actions, as appropriate. The NPL is designed primarily for information purposes and to assist in Agency management.

III Deletion Procedures

Upon determination that at least one of the criteria described in s 300.66(c)(7) has been meet, EPA may formally begin deletion procedures. The first steps are the preparation of a Superfund Close Out Report and the updating of the local information repository and the Regional deletion docket. These actions have been completed. This Federal Register notice, and concurrent notice in the local newspaper in the vicinity of the site, announce the initiation of a 30-day public comment period. The public is asked to comment on EPA's intention to delete the site from the NPL; all critical documents needed to evaluate EPA's decision are generally included in the information repository and the deletion docket.
Upon completion of the public comment period, the EPA Regional Office will prepare a responsiveness summary which addresses any comments received. The public is welcome to contact the EPA Regional Office to obtain a copy of this responsiveness summary. If, after receiving public comment, EPA determines that deletion from the NPL is appropriate, a final notice of deletion will be published in the Federal Register.

IV. Basis for Intended Site Deletion

The following summary provides the Agency's rationale for intending to **delete** this Site from the NPL.
"Norman **Poer Farm** Superfund Site"
"Charlottesville, Indiana"
The Norman **Poer Farm** Superfund Site is located about 4 miles north of Charlottesville on a 4 1/2 acre tract of land in Hancock County, Indiana. The town of Greenfield lies approximately 9 miles west of the site.
Approximately 260 drums containing liquid wastes were reported to have been placed on the site in 1973. The wastes, primarily offgrade solvents and paint

resins supplied to Norman Poer and Michael Coleman by Inmont Corporation, were intended to be blended into low quality, bridge and barn paint. The project was abandoned, and the drums were stockpiled on the Poer property. In August 1981, the Hancock County Health Department requested cleanup assistance from the State Fire Marshall because of the potential fire hazard. Since 1981, local, State, and Federal officials have conducted on-site and off-site investigations and sampling.

Emergency action cleanup activities were initiated by EPA in June 1983 and concluded in July 1983. All wastes were removed from the site, and 6 to 8 inches of soil were removed from drum storage areas on-site. The site was placed on the NPL in September 1983.

In 1985, Inmont signed a Consent Order with the EPA and the Indiana State Board of Health (ISBH), under which Inmont agreed to reimburse EPA for costs and to conduct a Remedial Investigation (RI) and Feasibility Study (FS). The RI studied the surface soils, soil borings, soil affected by site drainage, and groundwater. Sample analyses showed that EPA had removed all contamination detected to de minimis levels during the 1983 removal action. Since the RI indicated that the site no longer posed a threat to public health and environment, the EPA concluded that a FS was not necessary.

On September 29, 1988, Region 5 approved a Record of Decision (ROD) which called for No Further Action, once monitoring wells were decommissioned. The Indiana Department of Environmental Management (IDEM) formerly named ISBH, concurred with the ROD on September 28, 1988. After the sealing and abandonment of the monitoring wells according to State specifications, IDEM concurred on December 22, 1988, with the EPA's intent to delete the site from the NPL.

EPA's community relations staff conducted an active campaign to ensure that the residents were well informed about the activities at the site. Community relations activities included public meetings; press releases, progress fact sheets, and media contacts; establishing and maintaining an information repository; and a development of a formal procedure for responding to citizen inquiries. These activities have been ongoing from the inception of the removal action, to the signing of the ROD. The selected remedy of no further action was presented in the August 1988 Proposed Plan and the September 8, 1988, public meeting. The public reaction to the selected remedy of the ROD and the site cleanup has been positive. EPA plans to continue community relations activities throughout the deletion process.

EPA, in consultation with the State of Indiana, has determined that all appropriate Fund-financed responses under CERCIA have been implemented at the Norman Poer Farm site and that no further cleanup by responsible parties is appropriate.

Dated: August 18, 1989.

Valdas V. Adamkus,

Regional Administrator, U.S. EPA--Region V.

[FR Doc. 89-22075 Filed 9-20-89; 8:45 am]

BILLING CODE 6560-50-M

Citation 54 FR 39011-01 | Rank(R) R 2 OF 2 | Database FR | Mode P

PROPOSED RULES

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 300

[SW-FRL-3649-4]

National Oil and Hazardous Substance Contingency Plan; The National Priorities List

Friday, September 22, 1989

AGENCY: Environmental Protection Agency.

ACTION: Notice of intent to delete site from the National Priorities List; request for comments.

SUMMARY: The Environmental Protection Agency (EPA) announces its intent to **delete** the **Petersen Sand** and Gravel site from the National Priorities List (NPL) and requests public comment. The NPL is Appendix B to the National Oil and Hazardous Substance Contingency Plan (NCP), which EPA promulgated pursuant to section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA). This action is being taken by EPA, because it has been determined that all Fund financed response under CERCLA have been implemented and EPA, in consultation with the State, had determined that no further cleanup is appropriate. The intention of this notice is to request public comment on the intent of EPA to **delete** the **Petersen Sand** and Gravel site.

DATE: Comments concerning the proposed deletion of site may be submitted on or before October 23, 1989.

ADDRESSES: Comments may be mailed to David P. Seely, Remedial Project Manager, U.S. EPA, Office of Superfund, 230 S. Dearborn St., Chicago, Illinois, 60604. The comprehensive information on the site is available at your local information repository located at: Lake/Cook Memorial Library, 413 N. Milwaukee, Libertyville, Illinois, 60048.

Request for comprehensive copies of documents should be directed formally to the appropriate Regional Docket Office. Address for the Regional Docket Office is C. Freeman (5HS-12), Region V, U.S. EPA, 230 S. Dearborn Street, Chicago, Illinois, 60604, (312) 886-6214.

FOR FURTHER INFORMATION CONTACT: David P. Seeley, Region V, U.S. EPA, 230 S. Dearborn Street, Chicago, Illinois, 60604, (312) 886-7058 or Mary Ann Croce, 5PA-14, Office of Public Affairs, Region V, U.S. EPA, 230 S. Dearborn Street, Chicago, Illinois, 60604, (312) 886-1728.

SUPPLEMENTARY INFORMATION:

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I. Introduction

The Environmental Protection Agency (EPA) announces its intent to **delete** the **Petersen Sand** and Gravel site from the National Priorities List (NPL), Appendix B, of the National Oil and Hazardous Substance Contingency Plan (NCP), and requests comments on the deletion. The EPA identifies sites that appear to present a significant risk to public health, welfare or the environment, and maintains the NPL as the list of those sites. Sites on the NPL may be the subject of Hazardous Superfund (Fund) financed remedial actions. Any sites deleted from the NPL remain eligible for Fund-financed remedial actions in the unlikely event that the conditions at the site warrant such action.

The site EPA intends to **delete** from the NPL is **Petersen Sand** and Gravel, Libertyville, Illinois.

The EPA will accept comments on this proposed deletion for 30 days after publication of this notice in the Federal Register.

Section II of this notice explains the criteria for deleting sites from the NPL. Section III discusses procedures that EPA is using for this action and those that the Agency is considering using for future site deletions. Section IV discusses the history of the site and explains how the site meets the deletion criteria.

The Agency believes it is appropriate to review all sites being considered or proposed for deletion from the NPL, including the site being noticed today, to determine whether the requirement for a five-year review (under CERCLA section 121(c)) applies. This is consistent with the intent of the statement in the Administrator's Management Review of the Superfund Program (the "90-day Study"), that "EPA will modify Agency policy so that no site, where hazardous substances remain, will be deleted from the NPL until at least one five year review is conducted and the review indicates that the remedy remains protective of human health and the environment." EPA will shortly issue its policy on when and how five-year review sites may be deleted from the NPL. This policy may have an effect on the timing of site deletions proposed in this and other notices.

II. NPL Deletion Criteria

The 1985 amendments to the NCP established the criteria the Agency uses to delete sites from the NPL, 40 CFR 300.66(c)(7), provide that sites "may be deleted from or recategorized on the NPL where no further response is appropriate". In making this determination EPA will consider whether any of the following criteria has been met:

(i) EPA, in consultation with the State, has determined that responsible or

other parties have implemented all appropriate response actions required.
(ii) All appropriate Fund-financed responses under CERCLA have been implemented; and EPA, in consultation with the State, has determined that no further cleanup by responsible parties is appropriate.
(iii) Based on a remedial investigation, EPA, in consultation with the State, has determined that the release poses no significant threat to public health or the environment and, therefore, remedial measures are not appropriate.
Before deciding to delete a site, EPA must make a determination that the remedy, or existing site conditions at sites where no action is required, is protective of public health, welfare, and the environment.
Deletion of the site from the NPL does not preclude eligibility for subsequent Fund-financed actions if future conditions warrant such actions. s 300.66(c)(8) of the NCP states that Fund-financed actions may be taken at sites that have been deleted from the NPL.
Deletion of sites from the NPL does not itself create, alter, or revoke any individual's rights or obligations. Furthermore, deletion from the NPL does not in any way alter EPA's right to take enforcement actions, as appropriate. The NPL is designed primarily for information purposes and to assist in Agency management.

III. Deletion Procedures

Upon determination that at least one of the criteria described in s 300.66(c)(7) has been met, EPA may formally begin deletion procedures. The first steps are the preparation of a Superfund Close-Out Report and the updating of the local information repository and the Regional deletion docket. These actions have been completed. This Federal Register notice, and concurrent notice in the local newspaper in the vicinity of the site, announce the initiation of a 30-day public comment period. The public is asked to comment on EPA's intention to delist the site from the NPL; all critical documents needed to evaluate EPA's decision are generally included in the information repository and the deletion docket.
Upon completion of the public comment period, the EPA Regional Office will prepare a Responsiveness Summary to evaluate and address concerns which were raised. The public is welcome to contact the EPA Regional Office to obtain a copy of this responsiveness summary, when available. If EPA still determines that deletion from the NPL is appropriate, a final notice of deletion will be published in the Federal Register. However, it is not until the next official NPL rulemaking that the site would be actually delisted.

IV. Basis for Intended Site Deletion

The following summary provides the Agenda's rationale for intending to **delete** this Site from the NPL: **"Petersen Sand** and Gravel Superfund Site", Libertyville, Illinois
The **Petersen Sand** and Gravel Site is located northeast of the intersection of Routes 21 and 137, approximately one mile north of Libertyville, Illinois. The site is comprised of about 20 acres in the northwest corner of the Petersen Sand and Gravel Pit. This area was used for the disposal of miscellaneous debris and hazardous materials including paint, paint waste and solvents.

Between 1955 and 1958, Mr. Petersen started allowing dumping of refuse in a 3-to-4 acre worked-out portion of the gravel pit. The refuse supposedly consisted primarily of construction debris, trees, tires, and other nonhazardous materials. When Mr. Petersen began accepting hazardous materials at the site is unknown.

In 1971, Petersen requested and was denied a landfill permit. Also in 1971, the Illinois Environmental Protection Agency (IEPA) investigated reports of illegal dumping and ordered immediate closure of the site. In 1973, the Illinois Pollution Control Board ordered Petersen to remove some of the wastes and cover refuse, among other requirements. Local residents reported in 1976 that approximately 500 drums of waste had not been removed. Between 400 and 500 55-gallon drums of paint and solvent wastes were removed from the site in 1977 by Mr. Petersen at the advice of the Illinois Attorney General.

In 1979, the Lake County Forest Preserve District (LCFPD) purchased a tract of land along the east bank of the Des Plaines River which included the pit. They are planning to make the area into a recreational lake after mining operations are completed by Lake County Grading.

The Lake County Grading Company, which took over the mining operation in 1983, discovered buried drums during grading operations. Later that year, approximately 500 drums of solvents and 1,000 paint cans, along with contaminated soils were removed by a clean-up contractor for the LCFPD.

The Petersen Sand and Gravel Site was placed on the NPL on October 15, 1984.

In 1985, IEPA and U.S. EPA signed a cooperative agreement for the IEPA to perform a Remedial Investigation/Feasibility Study (RI/FS) at the site.

In January 1986, Planning Research Corporation (PRC) began RI/FS work under contract with IEPA. Field investigations by the IEPA and U.S. EPA took place between October 1986 and December 1987. A final RI Report was completed in April 1988. The RI studied the surface soils, soil borings, groundwater, surface water and sediments. Sample analyses showed that the previous removal actions removed all contamination to minimus levels. Since the RI indicated that the site no longer posed a threat to public health and the environment, the EPA concluded that an FS was not necessary.

On September 14, 1988, Region V approved a Record of Decision (ROD) which selected the No Further Action remedy for the site. The selected remedy does not require any additional monitoring of the site. The Illinois Environmental Protection Agency (IEPA), concurred with the ROD on August 4, 1988. IEPA has also concurred with the EPA's intent to delete the site from the NPL.

The IEPA's community relations staff conducted an active campaign to ensure that the residents and local officials were well informed about the activities at the site. Community relations activities included public meetings, press releases, progress fact sheets, and establishing and maintaining an information repository. These activities were ongoing from the inception of the RI to the signing of the ROD. The selected remedy of No Further Action was presented in the June 1988 Proposed Plan and the June 21, 1988 public meeting. The public reaction to the selected remedy has been positive. U.S. EPA plans to continue community relations activities throughout the deletion process.

EPA, in consultation with the State of Illinois, has determined that all appropriate Fund-financed responses under CERCLA have been implemented at the Petersen Sand and Gravel Site and that no further cleanup is appropriate.

Valdas V. Adamkus,

Regional Administrator.

[FR Doc. 89-22418 Filed 9-21-89; 8:45 am]

BILLING CODE 6560-50-M

54 FR 39011-01
END OF DOCUMENT

Citation 55 FR 51928-01 | Rank(R) R 4 OF 8 | Database FR | Mode P

PROPOSED RULES

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 300

[FRL-3870-7]

National Oil and Hazardous Substances Pollution Contingency Plan, National Priorities List

Tuesday, December 18, 1990

AGENCY: Environmental Protection Agency.

ACTION: Notice of Intent to Delete the M&T **DeLisa** Landfill Site from the National Priorities List: Request for Comments.

SUMMARY: The Environmental Protection Agency (EPA) Region II announces its intent to delete the M&T **DeLisa** Landfill site (Site) from the National Priorities List (NPL) and requests public comment on this action. The NPL constitutes Appendix B to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which EPA promulgated pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended. EPA and the State of New Jersey have determined that no further cleanup by responsible parties is appropriate under CERCLA. Moreover, EPA and the State have determined that CERCLA activities conducted at the Site to date have been protective of public health, welfare, and the environment.

DATES: Comments concerning this Site may be submitted on or before February 7, 1991.

ADDRESSES: Comments may be mailed to: Richard L. Caspe, P.E., Director, Emergency and Remedial Response Division, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, Room 737, New York, New York 10278.

Comprehensive information on this site is available through the EPA Region II public docket, which is located at EPA's Region II office and is available for viewing, by appointment only, from 9 a.m. to 5 p.m., Monday through Friday, excluding holidays. Requests for appointments to view this information in the Regional public docket should be directed to: Mr. Lance R. Richman, P.G., Remedial Project Manager, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, Room 13100, New York, New York 10278, (212) 264-6695.

Background information from the Regional public docket is also available for viewing at the Site's Administrative Record depository located at: Neptune Township Public Library, 25 Neptune Boulevard, Neptune Township, New Jersey.

FOR FURTHER INFORMATION CONTACT: Mr. Lance R. Richman, P.G., Remedial Project Manager, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, Room 13100, New York, New York 10278, (212) 264-6695.

SUPPLEMENTARY INFORMATION:
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I. Introduction

The Environmental Protection Agency (EPA) Region II announces its intent to delete the Site from the National Priorities List (NPL) and requests public comment on this action. The NPL constitutes Appendix B to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which EPA promulgated pursuant to section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended. The EPA identifies sites that appear to present a significant risk to public health, welfare, or the environment and maintains the NPL as the list of those sites. Sites on the NPL may be the subject of remedial actions financed by the Hazardous Substances Superfund Response Trust Fund (Fund). Pursuant to s 300.425(e)(3) of the NCP, any site deleted from the NPL remains eligible for Fund-financed remedial actions if conditions at the Site warrant such action.

The EPA will accept comments concerning this Site for thirty (30) days (or until February 7, 1991) after publication of this notice in the Federal Register.

Section II of this notice explains the criteria for deleting sites from the NPL. Section III discusses procedures that EPA is using for this action. Section IV discusses how the Site meets the deletion criteria.

II. NPL Deletion Criteria

The NCP establishes the criteria the Agency uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate. In making this determination, EPA will consider whether any of the criteria have been met:

(i) EPA, in consultation with the State, has determined that responsible or other parties have implemented all appropriate response actions required; or

(ii) All appropriate Fund-financed responses under CERCLA have been implemented and EPA, in consultation with the State, has determined that no further cleanup by responsible parties is appropriate; or

(iii) Based on a remedial investigation, EPA, in consultation with the State, has determined that the release poses no significant threat to public health or the environment and, therefore, taking of remedial measures is not appropriate.

III. Deletion Procedures

The NCP provides that EPA shall not delete a site from the NPL until the state

in which the release was located has concurred, and the public has been afforded an opportunity to comment on the proposed deletion. Deletion of a site from the NPL does not affect responsible party liability or impede agency efforts to recover costs associated with response efforts. The NPL is designed primarily for informational purposes and to assist Agency management.

EPA Region II will accept and evaluate public comments before making a final decision to delete. The Agency believes that deletion procedures should focus on notice and comment at the local level. Comments from the local community may be most pertinent to deletion decisions. The following procedures were used for the intended deletion of the Site:

1. On September 20, 1990, EPA Region II executed a Record of Decision (ROD) which states that the Site should be addressed under the authorities designated to close and monitor solid waste landfills. The State concurred with the ROD and indicated that they would address potential problems associated with solid waste disposal "for the Site pursuant to the New Jersey Solid Waste Management Act and the regulations promulgated pursuant thereto, once the Site has been de-listed from the National Priorities List (NPL)."

2. EPA Region II has subsequently recommended deletion and has prepared the relevant documents. The Region has also made all relevant documents available in the Regional office and local site information repository.

3. Concurrent with this National Notice of Intent to Delete, a local notice has been published in local newspapers and has been distributed to appropriate federal, state and local officials, and other interested parties. This local comment announces a thirty (30) day public comment period on the deletion package starting on January 7, 1991, and concluding on February 7, 1991.

The comments received during the comment period will be evaluated before any final decision is made. EPA Region II will prepare a Responsiveness Summary which will address the comments received during the public comment period.

The deletion process will be completed upon the EPA Region II Regional Administrator placing a notice in the Federal Register. The NPL will reflect any deletions in the next final update. Public notices and copies of the Responsiveness Summary will be made available to local residents by Region II.

IV. Basis for Intended Site Deletion

The Site is located in the southeastern corner of Monmouth County, northwest of the City of Asbury Park in Ocean Township, New Jersey. The 132-acre Site contains three major building complexes, the Seaview Square Mall complex (Mall), the Seaview Movie Theater complex, and the Acme Supermarket, each of which is surrounded by a paved parking area.

The landfill was in operation from 1941 until 1974 under a New Jersey Department of Environmental Protection (NJDEP) permit. There is no documented evidence which demonstrates that the landfill was used for the disposal of hazardous wastes. The landfill was closed in 1974 in accordance with NJDEP requirements of the time. After closure an investigation of the landfill area was undertaken by Woodward-Gardner and Associates, Inc., for the Goodman Company. Subsequently the Goodman Company constructed the Mall on 30 acres of the 39-acre former landfill for Equitable Real Estate Investment Management, Inc., the present owner of the Mall property. The report recommended control

measures to protect against the possible impact of gas and/or leachate generation from the landfill and described other measures that would be needed to provide a stable soil for the construction of the proposed buildings. These recommendations were incorporated into the design and construction of the Mall which was completed in 1977.

Subsequent to the listing of the Site on the NPL, on September 8, 1983, Fred C. Hart and Associates under contract by the owners of the Mall (the Equitable Life Assurance Society of the United States) conducted two environmental investigations, one in 1984 and more recently in 1988, both under EPA oversight. An endangerment assessment was completed by EPA in June of 1990 to determine the baseline risk (an evaluation of the potential threat to human health and the environment in the absence of any remedial action) due to the release of hazardous substances that may be attributable to the Site. Upon completion of these investigations, the following conclusions were reached.

- Groundwater quality in the local shallow Kirkwood aquifer immediately underlying the Site and in direct physical contact with landfill materials, does not appear to have been significantly impacted by hazardous substances. Due to the absence of any significant water quality degradation in the shallow Kirkwood aquifer, together with the laterally extensive presence of the Shark River Marl which locally serves as a confining layer below the Kirkwood aquifer, groundwater quality in the deeper Vincentown aquifer is not anticipated to be at risk as a result of past disposal practices at the Site.
- No volatile organic compounds (VOCs) or pesticide/polychlorinated biphenyl (PCB) compounds were detected above laboratory method detection limits during either sampling round in groundwater samples from private potable wells. Only one semi-volatile compound, di-n-octylphthalate, was detected during the 1988 round of sampling, and it was below levels of concern. Several metals, including copper, lead, nickel, and zinc, were also present below Safe Drinking Water Act (SDWA) standards in potable water samples collected during the 1984 sampling effort.
- Surface water and sediment samples collected did not find any significant environmental quality degradation due to the presence of hazardous substances at the down-gradient surface water locations.
- Although landfill gas is being generated at the Site, and there is evidence of slightly elevated levels of VOC accumulation along the unventilated northern edge of the mall, the sampling and analysis of specific VOC target compounds, such as benzene, toluene, and xylene, did not indicate a definitive pattern of gas infiltration. Therefore, it was determined that the landfill is not the source of detectable levels of VOCs in the Mall. In addition, concentrations of VOCs in the Mall are not outside the range of VOC concentrations typically found in other public and private indoor spaces.

Upon the completion of the remedial investigations and the endangerment assessment, it became evident that this Site should be handled under the authorities designated for closure and post-closure activities at solid waste landfills. Contaminants found at the Site are indicative of solid waste landfills. Unlike typical CERCLA sites, the landfill is not releasing significant concentrations of CERCLA hazardous substances.

Although remedial action under CERCLA is not warranted, EPA has recommended to the New Jersey Department of Environmental Protection's (NJDEP) Division of Solid Waste Management that a number of environmental controls be implemented

and maintained at the Site to address potential problems associated with solid waste disposal. NJDEP's Division of Solid Waste Management regulates solid waste landfill activities in the State of New Jersey.
Dated: November 29, 1990.

Constantine Sidamon-Eristoff,

Regional Administrator, USEPA, Region II.

[FR Doc. 90-29549 Filed 12-17-90; 8:45 am]

BILLING CODE 6560-50-M

55 FR 51928-01
END OF DOCUMENT

United States
Environmental Protection
Agency

Office of
Emergency and
Remedial Response

EPA/ROD/R02-90/108
September 1990

EPA

Superfund Record of Decision:

M&T DeLisa Landfill, NJ

50272-101

REPORT DOCUMENTATION PAGE	1. REPORT NO. EPA/ROD/R02-90/108	2.	3. Recipient's Accession No.

4. Title and Subtitle
SUPERFUND RECORD OF DECISION
M&T DeLisa Landfill, NJ
First Remedial Action - Final

5. Report Date
09/20/90

6.

7. Author(s)

8. Performing Organization Rept. No.

9. Performing Organization Name and Address

10. Project/Task/Work Unit No.

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(C)
(G)

12. Sponsoring Organization Name and Address
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

13. Type of Report & Period Covered
800/000

14.

15. Supplementary Notes

16. Abstract (Limit: 200 words)

The 132-acre M&T DeLisa Landfill site is northwest of the city of Asbury Park in Ocean Township, New Jersey. The 39-acre M&T DeLisa landfill was operated with a State permit from 1914 until 1974. After the landfill was closed, a private company constructed a shopping mall on 30 acres of the landfill. The developer took control measures to protect against the generation of landfill gases and leachate. Although landfill gas is generated at the site and slightly elevated levels of VOC accumulation were detected on the northern edge of the mall, sampling and analysis indicate that the landfill is not the source of detectable levels of VOCs in the mall. The developer installed storm drainage from the parking lot to protect Deal Lake Brook, which is the nearest surface water and is immediately south of the mall. Onsite surface water and ground water are not used as sources of potable water. Site investigations and historical research on site activities revealed no evidence to indicate that the landfill was used for hazardous waste disposal. There are no contaminants of concern affecting the site, therefore, this is a no action Record of Decision (ROD).

(See Attached Page)

17. Document Analysis a. Descriptors
Record of Decision - M&T DeLisa Landfill, NJ
First Remedial Action - Final
Contaminated Medium: None
Key Contaminant: None

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement	19. Security Class (This Report) None	21. No. of Pages 48
	20. Security Class (This Page) None	22. Price

(See ANSI-Z39.18) *See Instructions on Reverse*

OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

EPA/ROD/R02-90/108
M&T DeLisa Landfill, NJ
'rst Remedial Action - Final

Abstract (Continued)

The selected remedial action for this site includes a no further action scenario. Although no significant contamination is present at the site, EPA recommends that environmental controls be implemented, including continued surface and ground water monitoring, restricting possible future use of onsite ground water, continued sampling and monitoring of the leachate collection system, replacing a gas vent, sealing cracks in building floors and walls in contact with subsurface soil, improving detention ponds leading into Deal Lake Brook, venting of the north corridor area of the mall, and periodic indoor and outdoor air monitoring. EPA has determined that such actions will not be implemented under the authority of the Superfund program, and responsibility for the site has been transferred to the State. There are no costs associated with this no action remedy.

PERFORMANCE STANDARDS OR GOALS: Not applicable.

DECLARATION STATEMENT

M & T DELISA LANDFILL

RECORD OF DECISION

SITE NAME AND LOCATION

M & T DeLisa Landfill
Ocean Township, Monmouth County, New Jersey

STATEMENT OF BASIS AND PURPOSE

This document presents the decision selected for addressing the M & T DeLisa Landfill Site in Ocean Township, New Jersey (the Site), which was determined in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 (CERCLA), and to the extent practicable, the National Oil and Hazardous Substances, Pollution Contingency Plan, 40 CFR Part 300. This decision document summarizes the factual and legal basis for this determination and is based on the administrative record for this Site which is comprised of the documents listed in the attached index.

The State of New Jersey concurs with this decision.

SUMMARY OF RATIONALE FOR NOT TAKING ACTION

The U. S. Environmental Protection Agency (EPA) has determined that the M & T DeLisa Landfill Site should be addressed under the authorities designated to close and monitor solid waste landfills. This determination is based upon a review of historical documentation which did not reveal any past disposal of hazardous waste at the Site, the results of the remedial investigation (RI) which demonstrate that the landfill is not a source of significant concentrations of any hazardous substances, and a conservative assessment of risk attributable to the release of hazardous substances, from the landfill which indicates that the current risk posed by the Site is within an acceptable range.

Upon completion of the RI, it became evident that the conditions at the Site do not warrant remedial action under CERCLA. Accordingly, an evaluation of remedial alternatives, as described by CERCLA, was not appropriate for the Site. Therefore, an evaluation of remedial alternatives has not been conducted.

Although remedial action under CERCLA is not warranted, EPA recommends that environmental controls be implemented and maintained at the Site to address potential problems associated with solid waste disposal. EPA has determined that such actions should not be handled under the auspices of the Superfund program. Since the New Jersey Department of Environmental Protection (NJDEP) regulates solid waste landfill activities in the State of New Jersey, EPA is transferring responsibility for the Site to the NJDEP's Division of Solid Waste Management for future action.

DECLARATION STATEMENT

EPA has determined that it is not appropriate to use CERCLA statutory authority to remediate the Site. Subtitle D of the Resource Conservation and Recovery Act of 1976 as amended by the Solid Waste Disposal Act of 1980 (RCRA) is the Federal statute pertaining to solid waste landfills. RCRA and its regulations address among other things the post-closure monitoring requirements for landfills. NJDEP is authorized to regulate solid waste landfill closures and post-closure ground water and surface water monitoring requirements for landfills in New Jersey. By issuing this Record of Decision, EPA is formally transferring responsibility for the Site to NJDEP for future action.

Constantine Sidamon-Eristoff, Regional Administrator

September 20, 1990
Date

ROD FACT SHEET

SITE
M&T De Lisa Landfill Site
Monmouth County, New Jersey
USEPA Region II
HRS Score: 32.27
NPL Rank: 865

ROD
Date Signed: September 20, 1990
Remedy: NO ACTION

The Site will be transferred to the solid waste program of the New Jersey Department of Environmental Protection (NJDEP). NJDEP may develop and implement actions as appropriate for post-closure landfill activities. EPA recommends that environmental controls be implemented by NJDEP to address potential solid waste issues.

Capital Cost: NA
O&M/year: NA
Present Worth: NA

Lead
Primary Contact: Lance R. Richman, P.G., (212) 264-6695 (USEPA)

Potentially Responsible Party (PRP):
Equitable Real Estate Investment Management, Inc.

PRP Contact: Mr. Michael Rodberg, Esq., (201) 992-8700

WASTES
Type: municipal solid waste
Medium: groundwater and air
Origin: private landfill for municipal waste
Estimated Quantities: Landfill covers approximately 39 acres

AUG 21 1990

Record of Decision for the M&T DeLisa Landfill Site, Monmouth County, New Jersey

Richard Caspe, Director
Emergency & Remedial Response Division

Constantine Sidamon-Eristoff
Regional Administrator

Attached is the Record of Decision (ROD) for the M&T DeLisa Landfill Site located at Ocean Township, in Monmouth County, New Jersey.

Lance R. Richman, P.G. is the Regional Project Manager for this Site.

This is an EPA lead site. The Equitable Real Estate Investment Management Inc., the potentially responsible party for the Site, contracted Fred C. Hart Associates, Inc., to conduct the remedial investigations, under Administrative Orders on Consent issued by EPA in November of 1983 and March of 1988.

The New Jersey Department of Environmental Protection (NJDEP) has reviewed the ROD and supporting documents and concurs on this no action determination. Both the ROD and Proposed Plan were reviewed in-house by the Hazardous Waste Facilities Branch (RCRA), Office of Ground Water Management, Environmental Impacts Branch, Air Compliance Branch, Office of Regional Counsel, NJ Compliance Branch (Superfund), Program Support Branch (Superfund), and ATSDR.

The 30 day public comment period for the Proposed Plan ended on July 27, 1990. EPA received two written letters in response to the plan. The public meeting was held on July 12, 1990. The meeting was well attended. Comments received during the public comment period are addressed in the attached Responsiveness Summary.

EPA's decision is as follows.

> This Site should be handled under the authorities designated to close and remediate municipal landfills. An evaluation of remedial action alternatives, as described by CERCLA was not appropriate for this site. NJDEP is authorized to regulate municipal landfill closures and post-closure monitoring in New Jersey. **For this reason, EPA is referring this Site to the NJDEP for further action.** Current State statutes also regulate post-landfill closure ground water and surface water monitoring requirements for municipal landfills.

SYMBOL --->	NNJCS	ORC	NNJCS	NJCB	ADNJP	ADD	DD	DEP
SURNAME -->	RICHMAN	FINN	DIFORTE	BASSO	FRISCO	CALLAHAN	CASPE	MARSHALL
DATE ------>	8/2	8/14	8/12	8/7	8/8		8/21	8/22

SYMBOL --->	DRA	RA						
SURNAME -->	MUSZYNSKI	ERISTOFF						
DATE ------>		8/21						

This decision is identical to the one proposed in the Proposed Plan, which EPA submitted to the public in June of 1990 (see Attachment).

NJDEP's Division of Solid Waste Management has indicated that it will accept authority for the Site as soon as it is deleted from the National Priorities List (NPL). Upon the execution of this ROD, EPA will commence rulemaking to delete the Site from the NPL.

Attachments

bcc: R. Caspe, ERRD
R. Basso, NJCB
N. DiForte, N-NJCS
D. Finn, ORC

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
JUDITH A. YASKIN, COMMISSIONER
CN 402
TRENTON, N.J. 08625-0402
(609) 292-2885
Fax (609) 984-3962

SEP 17 1990

Mr. Constantine Sidamon-Eristoff
Regional Administrator
USEPA - Region II
26 Federal Plaza
New York, NY 10278

Dear Regional Administrator Sidamon-Eristoff:

Re: Record of Decision
M & T Delisa Landfill
Ocean Township, Monmouth County, New Jersey

New Jersey Department of Environmental Protection (NJDEP) has reviewed the Record of Decision (ROD) and other documents relevant to the M&T Delisa Superfund Site including the Final Remedial Investigation Report dated March 30, 1990, the Draft/Final Endangerment Assessment dated February 16, 1990, and the Draft Feasibility Study Report dated April 26, 1990.

In the ROD, EPA declares that the selection of the "no action" alternative constitutes the final action at the site under Federal and State auspices of the Superfund Program. EPA will formally transfer responsibility for the site to NJDEP for future action under New Jersey's authority to regulate solid waste landfill closure and post-closure activities.

The ROD states that although there is no significant contamination due to the release of hazardous substances which are attributable to the Site, there are environmental controls which may be implemented to address potential solid waste issues, including:

- Continued monitoring of surface and groundwater;

- Modification of the property deed to restrict the possible future use of on-site ground water;

- Continued sampling, operation and maintenance of the existing leachate collection system;

- Replacement of vent No. 25 and continued use and maintenance of all on-site gas vents;

- Sealing of cracks in building floors and walls of the Seaview Square Mall (Mall) which are in contact with subsurface soil;

- Improvement and maintenance of the detention ponds leading into Deal Lake Brook;

- Maintain current positive pressure operation of the Mall heating, ventilation and air conditioning system;

- Venting of the north corridor area of the Mall; and

- Periodic indoor and outdoor air monitoring.

NJDEP hereby concurs with EPA's selection of the "no action" alternative and will accept responsibility for the site pursuant to the New Jersey Solid Waste Management Act and the regulations promulgated pursuant there to, once the Site has been delisted from the National Priorities List (NPL).

If you have any questions regarding this matter please contact, Dennis Hart, Assistant Director, Responsible Party Cleanup Element at (609) 633-0719.

Sincerely,

Judith A. Yaskin

Enclosure

Decision Summary

M & T DeLisa Landfill Site

SITE DESCRIPTION

The M & T DeLisa Landfill site (Site) is located in the southeastern corner of Monmouth County, northwest of the City of Asbury Park in Ocean Township, New Jersey (see Figure 1). The 132-acre Site is bounded on the west by Route 18, on the south by Route 66, on the east by route 35, and on the north by an industrial park located off Sunset Avenue (see Figure 2). The parcel contains three major building complexes, the Seaview Square Mall complex (Mall), the Seaview Movie Theater complex, and the Acme Supermarket, each of which is surrounded by a paved parking area. The only wooded portions of the parcel are located in the southeast corner of the Site, south of the Route 35 mall access road.

Immediately south of the Mall and located on the Site is the most southern arm of Deal Lake Brook which flows from west to east to Deal Lake. Storm drainage from the parking lots and adjacent roadways discharge into detention ponds that feed into Deal Lake Brook.

The three uppermost geologic formations underlying the Site are (in descending order): the Kirkwood Formation - consisting of alternating layers of sand, silt and clay that are discontinuous both laterally and vertically, the Manasquan Formation (which is locally known as the Shark River Marl) - consisting of a low permeability, clayey sand, and the Vincentown Formation - consisting of a fine to medium grained sand. Based on the low yield of the aquifer from on-Site monitoring wells, the Kirkwood is not considered to represent a major viable source of potable water in the vicinity of the Site. Based on information obtained from test borings, the Shark River Marl is at least thirty-five (35) feet thick at the Site and is considered a confining layer that separates the overlying Kirkwood Formation from the underlying Vincentown Formation. The Vincentown Formation is expected to represent a viable source of potable water in the vicinity of the Site. Nine (9) water supply wells are believed to be screened in this formation within approximately one mile of the Site.

SITE HISTORY AND ENFORCEMENT ACTIVITIES

The Site consists of 132 acres of which the former M & T DeLisa landfill occupied approximately 39 acres. The landfill was in operation from 1941 until 1974 under a New Jersey Department of Environmental Protection (NJDEP) permit. Records of landfill operations are limited. There is no documented evidence which demonstrates that the landfill was used for the disposal of hazardous wastes. Available information

indicates that the landfill was used for the disposal of refuse.

The landfill was closed in 1974 in accordance with NJDEP requirements of the time. After closure an investigation of the landfill area was undertaken by Woodward-Gardner and Associates, Inc., for the Goodman Company, who subsequently constructed the Mall on 30 acres of the 39-acre former landfill for Equitable Real Estate Investment Management, Inc., the present owner of the Mall property. The report recommended control measures to protect against the possible impact of gas and/or leachate generation from the landfill and described other measures that would be needed to provide a stable soil for the construction of the proposed buildings. These recommendations were incorporated into the design and construction of the Mall which was completed in 1977 (see Site Characterization).

Pursuant to Administrative Orders on Consent of November 1983 and March 1988, between EPA and the Equitable Life Assurance Society of the United States, Fred C. Hart Associates, Inc. was retained to conduct a remedial investigation on the Site in accordance with CERCLA and the NCP. The objectives of the remedial investigation were to characterize the nature and extent of any contamination associated with the Site, to identify off-site contamination and its impact on public health and the environment, and to determine whether there is a need for remedial measures to protect human health and the environment. The remedial investigation was conducted under two distinct investigatory programs. The initial investigation was completed in June of 1984, while the supplemental remedial investigation was completed in January of 1989. Additional indoor and outdoor air monitoring results were submitted in December of 1989, and the final remedial investigation report was submitted in March of 1990.

HIGHLIGHTS OF COMMUNITY PARTICIPATION

In accordance with the public participation requirements set forth in Sections 113 and 117 of CERCLA, the following activities were conducted. The Remedial Investigation Reports, the Endangerment Assessment, the Proposed Plan and other documents which comprise the administrative record for this site were released to the public for comment on June 18, 1990. These documents were made available to the public at the EPA Docket Room in Region II and at the Neptune Township Public Library in Neptune Township, New Jersey. On June 28, 1990, EPA published a notice in the Asbury Park Press which contained information relevant to the public comment period for the Site, including duration of the public comment period, date of the public meeting, and availability of the administrative record. The public comment period began on June 28, 1990 and ended on July 28, 1990. In addition, a public meeting was held on July 12, 1990, where representatives from EPA and the NJDEP answered questions regarding the Site and the decision under consideration. Responses to the

significant comments received during the public comment period are included in the Responsiveness Summary, which is part of this Record of Decision.

SCOPE OF RESPONSE ACTION

This declaration of "no action" constitutes the final action at the Site under Federal and State Superfund Programs. This "no action" decision is based upon a review of historical documentation which did not reveal any past disposal of hazardous waste at the Site, the results of the RI which demonstrate that the landfill is not a source of significant concentrations of any hazardous substances and a conservative assessment of risk attributable to the release of hazardous substances, from the Site which indicates that the current risk posed by the Site is within an acceptable range. After the Site is transferred to the solid waste program of NJDEP, NJDEP may develop and implement actions as appropriate for post-closure landfill activities.

Although there is no significant contamination due to the release of hazardous substances which are attributable to the Site, EPA recommends that environmental controls be implemented to address potential solid waste issues. They include:

- o continued monitoring of surface and ground water;
- o modification of the property deed to restrict the possible future use of on-site ground water;
- o continued sampling, operation and maintenance of the existing leachate collection system;
- o replacement of vent number 25 and continued use and maintenance of all on-site gas vents;
- o sealing of cracks in building floors and walls in contact with subsurface soil;
- o improvement and maintenance of the detention ponds leading into Deal Lake Brook;
- o maintain current positive pressure operation of Mall heating, ventilation and air conditioning system;
- o venting of the north corridor area of the Mall; and
- o periodic indoor and outdoor air monitoring.

SUMMARY OF SITE CHARACTERIZATION

With the building of the Mall, a number of construction elements were implemented to provide environmental controls, i.e., refuse movement, gas control, and leachate control. These are summarized below:

Refuse Movement. The refuse material was found to be unsuitable for building support, therefore, the refuse material situated under the planned Mall was removed. The refuse was excavated down to the underlying soils. Then it was placed in areas already containing refuse. The area excavated was replaced with clean fill which was capable of supporting the buildings. The result was that the buildings are constructed within a low permeability bowl-shaped soil configuration composed of the naturally occurring Shark River Marl material beneath the Mall and the 3 to 10 foot thick clay barrier installed during construction to prevent landfill gas migration to the buildings.

Landfill Gas Control. The mall construction implemented three measures to control the potential movement of landfill gas into the Mall. The first was the installation of the clay barrier discussed above. The second was the construction of passive control vents, consisting of perforated horizontal collection pipes located in the refuse attached to vertical pipes open to the atmosphere, which provide a preferential pathway for landfill gas migration and help prevent horizontal migration into the buildings. The last measure was to limit the permeability of the Mall's utility corridors (which contain sanitary sewers, electrical wiring, etc.) by placing all utility lines within one narrow corridor, replacing refuse in this corridor with clean soil, and compacting the soil to reduce permeability. Utilities which could not be placed within this corridor were enclosed in concrete.

Leachate Control. Leachate is generated when rainfall infiltrates into the ground and percolates through refuse material, or when ground water moves horizontally through the refuse. Four measures were implemented to minimize leachate generation: modifications to the storm water collection system, construction of a leachate collection system, installation of a clay barrier, and covering the surface of the landfill with pavement. The manner in which these measures were implemented is described below:

- The storm water collection system was designed to keep storm water separate from leachate by, 1) using the parking lot as a low permeability cap over the refuse to reduce infiltration of precipitation and collect storm water runoff, 2) constructing catch basins and storm drain pipes as close to the surface as possible, and 3) constructing storm water pipes designed to be impermeable to leachate infiltration.

- A leachate collection system consisting of a perforated pipe within a gravel

trench situated to intercept groundwater/leachate moving toward Deal Lake Brook was also installed; the liquid is then collected in a tank and discharged to a municipal waste water treatment plant.

- The clay barrier, which was installed between the refuse and clean soil fill, acts as a barrier to groundwater/leachate flow, preventing it from migrating to or under the Mall buildings.

- The surrounding parking lot acts as a low permeability cap thereby reducing the volume of rainwater which is available for leachate generation.

Remedial Investigations

As discussed earlier, Fred C. Hart and Associates under contract by the owners of the Mall (the Equitable Life Assurance Society of the United States) conducted two environmental investigations, one in 1984 and more recently in 1988, both under EPA oversight. The remedial investigations (RI's) characterized the nature and extent of ground water, surface water, and air contamination attributable to the release of hazardous substances from the site. The activities conducted under the investigations and a discussion of the results are presented below.

A hydrogeologic investigation was conducted to determine on-site geologic and hydrologic conditions and to evaluate impacts on local groundwater quality. A total of 7 monitoring wells and one boring were installed. All were logged by a field geologist to verify the geology of the area. The monitoring wells were then sampled along with 4 private drinking water wells in the area to obtain water quality data. The results of the hydrogeologic investigation are as follows:

1. The geology in the area consists of the Kirkwood Formation, Shark River Marl and Vincentown Formation (Figure 3). The Kirkwood Formation which is under part of the Site has a maximum thickness of 74 feet at monitoring well MW-6D and gradually pinches out to the south where it is estimated to be only 4.5 feet thick in monitoring well MW-1. Hydraulic conductivities (a measure of the ability of fluid to move through a porous media under force) in the Kirkwood Formation are somewhat variable and range from 1.6×10^{-2} to 7.6×10^{-5} cm/sec. The heterogeneity of the Kirkwood Formation at the Site, caused by the deposition of silts and clays of low hydraulic conductivity within the formation, reduces the hydraulic conductivity and yield which causes the aquifer to be less suitable for use as a potable water supply at the Site. Below the Kirkwood Formation and the landfill refuse is the Shark River Marl, a continuous clayey, silty formation. The extensiveness of the Shark River Marl (an average of 35 feet underlying the site) combined with its low hydraulic

conductivity drastically reduces the potential for contaminant transport between the upper Kirkwood Formation and the deeper Vincentown Formation. The Vincentown Formation, which exists under confined conditions, is used in the area as a potable water supply.

2. Groundwater flow in the Kirkwood aquifer is to the southeast towards Deal Lake Brook. It appears as though the brook is an expression of the groundwater table and that the shallow groundwater flow is intercepted by the brook.

3. In 1984, lead and arsenic were detected in unfiltered monitoring wells in samples in concentrations above regulatory levels (i.e., 230 and 68 part per billion respectively). However, subsequent sampling efforts (both filtered and unfiltered) did not detect significant concentrations of metals. The highest concentration of lead and arsenic detected in post-1984 sampling were 42.8, and 13.8 part per billion (ppb), respectively, which are below federal Safe Drinking Water Act (SDWA) maximum contaminant levels (MCLs) of 50 ppb. Although the metal concentration data from the initial round of sampling was not confirmed by subsequent sampling, EPA used this data in the risk assessment to provide a conservative evaluation of risk.

A surface water and sediment sampling effort was conducted to determine the potential impact of hazardous contaminants from the Site on surface water bodies in the vicinity. In 1984, samples were collected at on-site drainage areas, points where surface water runoff from the Site entered surface water bodies, and sediment deposition areas. At each surface water sampling location, a sediment sample was also collected. In addition to surface water/sediment sampling, storm drains and the leachate collection tank were sampled. In 1988, the sampling locations were modified based upon a better understanding of drainage patterns and flow directions. The 1988 sampling effort included four locations along Deal Lake Brook.

Surface water and sediment samples taken from the detention ponds and Deal Lake Brook in 1984 showed low to undetectable levels of volatile organic compounds (VOCs). In a number of samples, levels of iron, copper and other non-hazardous metal were found in excess of secondary Safe Drinking Water Act (SDWA) standards. While these metals in high enough doses can effect health, the secondary SDWA standards are based upon aesthetic water quality impacts such as the hardness and taste of the water. The reddish coloration of the stream is most likely attributable to the presence of these metals and in particular the iron content.

Although collection of leachate seep samples were planned, seep samples were not taken because seeps were not observed during sampling events. Instead, soil samples were taken in areas where staining indicated a possible previous seep location. The

only VOC found in the soil samples was methylene chloride (a common laboratory contaminant). In addition, metal concentrations were within the range of those typically found in natural soils.

Aqueous samples were collected from Site storm drains. These drains receive storm water runoff from the mall parking lots. Lead was detected in one sample at 600 ppb. Methylene chloride was the only VOC detected.

Both the liquid and sludge present in the leachate tank were sampled. With respect to the liquid samples, no VOCs were detected. Iron and manganese, which are not hazardous substance under CERCLA, were at concentrations of up to 56 ppm and 0.19 ppm, respectively. The secondary SDWA MCL for iron is 0.3 ppm while manganese is 0.05 ppm. Low levels of a number of metals were also detected in sludge from the leachate collection tank including copper, nickel, zinc, lead and some chromium. Methylene chloride and phthalates were also detected in sludge samples in 1984 but were not found in subsequent samples collected in 1988.

Air quality investigations were conducted during the RI in November/December of 1983, June of 1984, August of 1988, January of 1989, and October of 1989. The October 1989 effort, was performed by EPA. Samples were collected at all outdoor vents and indoors in all accessible areas of the lower levels of the Mall buildings. Outdoor vent sampling was done at the vent openings and at a distance of 50 meters from the vents. The sampling found some VOCs, methane, and carbon dioxide being liberated by the vents. Although indoor sampling found slightly elevated levels of VOCs along the northern edge of the Mall, no concentrations of VOCs above what would normally be expected in an indoor space were found.

Upon completion of the investigations, the following conclusions were reached.

- Groundwater quality in the local shallow Kirkwood aquifer immediately underlying the Site and in direct physical contact with landfill materials, does not appear to have been significantly impacted by hazardous substances. Due to the absence of any significant water quality degradation in the shallow Kirkwood aquifer, together with the laterally extensive presence of the Shark River Marl which locally serves as a confining layer below the Kirkwood aquifer, groundwater quality in the deeper Vincentown aquifer is not anticipated to be at risk as a result of past disposal practices at the Site.

- No VOCs or pesticide/PCB compounds were detected above laboratory method detection limits during either sampling round in groundwater samples from private potable wells. Only one semi-volatile compound, di-n-octylphthalate, was detected during the 1988 round of sampling,

and it was below levels of concern. Several metals, including copper, lead, nickel, and zinc, were also present below SDWA standards in potable water samples collected during the 1984 sampling effort.

- o Surface water and sediment samples collected did not find any significant environmental quality degradation due to the presence of hazardous substances at the down-gradient surface water locations.

- o Although landfill gas is being generated at the Site, and there is evidence of slightly elevated levels of VOC accumulation along the unventilated northern edge of the mall, the sampling and analysis of specific VOC target compounds, such as benzene, toluene, and xylene, did not indicate a definitive pattern of gas infiltration. Therefore, it was determined that the landfill is not the source of detectable levels of VOCs in the Mall. In addition, concentrations of VOCs in the Mall are not outside the range of VOC concentrations typically found in other public and private indoor spaces.

SUMMARY OF SITE RISKS

An endangerment assessment was conducted by EPA to determine the baseline risk (an evaluation of the potential threat to human health and the environment in the absence of any remedial action) due to the release of hazardous substances that may be attributable to the Site. The assessment began with selecting indicator chemicals which would be representative of Site risks. Sixteen indicator chemicals were chosen; they were: arsenic, barium, chromium, copper, iron, lead, manganese, mercury, nickel, zinc, benzene, carbon tetrachloride, chloroform, methylene chloride, toluene, 1,1,1-trichloroethane, trichloroethene, and xylene. EPA has developed two acceptable intake levels for non-carcinogens, 1) Acceptable Intake for Sub-chronic exposure (AIS)-the highest human intake of a chemical that does not cause adverse effects when exposure is short term, and 2) Acceptable Intake for Chronic exposure (AIC)-the highest human intake of a chemical that does not cause adverse effects when exposure is for a life time. For carcinogens, EPA has also developed Carcinogenic Potency Factors-the excess lifetime risk due to a continuous lifetime exposure to one unit of carcinogen concentration (Table 1). Chemicals were selected for each media to ensure that plausible exposure routes were evaluated. Then environmental fate and transport mechanisms were evaluated for each of the indicator chemicals. The following seven exposure routes were assessed (Table 2): 1) inhalation of indoor (Mall) air, 2) inhalation of air directly from gas vents both at the exhaust and 3) at 50 meters from the exhaust, 4) ingestion of surface water sediments, 5) ingestion (consumption) of fish, 6) ingestion of surface water, 7) ingestion of ground water from monitoring wells. Since surface and groundwater are currently not a source of potable water on the Site and the gas vent openings are situated on poles approximately 15 feet off the

ground, these exposure pathways were assessed only under future use scenarios. Consistent with EPA guidance, consumption rates for each indicator chemical were completed for the seven exposure routes using an average body mass of 70 kilograms (154 lbs) for an adult over a 70 year life-span. Sub-chronic exposures were calculated for consumption for 30 days of the indicator chemical at its maximum detected concentration (Table 3). Chronic exposure calculations were based on consumption of the geometric mean chemical concentration (average detected concentration level). Both future and current use scenarios were evaluated.

The results indicate that the only media posing a potential risk above EPA guidelines to human health is groundwater under a future use scenario (Table 2). Current use scenarios for groundwater and all other media demonstrate risk values within an acceptable range. Both hazard indices and cancer risks were summed to develop the cumulative hazard index and the cumulative cancer risk, respectively, to account for additive exposures. The resulting cumulative hazard indices are 4.23 for sub-chronic exposure, and 0.75 for chronic exposure; cumulative lifetime cancer risk was calculated to be 5.87×10^{-4} for an individuals lifetime excess carcinogenic risk. Under current use scenarios, the lifetime cancer risk calculates to 1.77×10^{-5}, with cumulative hazard indices of 1.11 for sub-chronic exposure and 1.88×10^{-2} for chronic exposure. Current Federal guidelines for acceptable exposures are a maximum health hazard index equal to 1.0 for chronic and sub-chronic, non-carcinogenic risk and an individual lifetime excess carcinogenic risk in the range of 1.0×10^{-4} to 1.0×10^{-6}.

The endangerment assessment identified arsenic as the only chemical in the groundwater that may cause its risk levels to exceed Federal guidelines in the future groundwater use scenarios (i.e., if potable water wells were drilled on Site in the Kirkwood aquifer there may be an unacceptable risk to users of that water). This finding is based on the conservative assumption that the arsenic concentrations found in the unfiltered groundwater samples are representative of groundwater quality in the Kirkwood aquifer. EPA believes that the levels of arsenic in samples from ground water monitoring wells are not representative of actual concentrations in the ground water because arsenic was detected only in unfiltered samples (arsenic tends to adsorb onto particles which immobilize the element). EPA believes that the actual risk from arsenic is acceptable for the following reasons: 1) arsenic was not detected in any off-site potable wells, 2) concentration levels in all filtered monitoring well samples are below Safe Drinking Water Act standards and are comparable to background levels, and 3) by including the arsenic concentration levels from unfiltered samples in the future use scenarios in the risk assessment, a conservative estimation of future potential risk was obtained (5.66×10^{-4}) which resulted in a risk value which only marginally exceeded EPA's target risk range (ie., 10^{-4} to 10^{-7}).

Furthermore, EPA believes that the use of the Kirkwood aquifer at the Site is a very remote possibility due to the limited aquifer thickness and low hydraulic conductivity.

Therefore, EPA believes that the portion of the Kirkwood aquifer underlying the Site is not an adequate source of water for a private well. However, as a precautionary measure, EPA recommends modifying the property deed to restrict the possible use of on-site groundwater.

In EPA's opinion, the threat to human health and the environment from hazardous substances attributable to this Site is minimal. This conclusion is based on the Site history and operations, the overall environmental setting and analytical data.

STATUTORY AUTHORITY FINDINGS

In December of 1982, the Site was proposed for the Superfund National Priorities List (NPL). The Site was officially added to the NPL in September of 1983.

Upon the completion of the remedial investigation, it became evident that this Site should be handled under the authorities designated for closure and post-closure activities at solid waste landfills. This conclusion is based in part upon a review of historical documentation which did not reveal any past disposal of hazardous waste at the Site, the results of the RI which demonstrate that the landfill is not a source of significant concentrations of any hazardous substances. Contaminants found at the Site are indicative of solid waste landfills. Unlike typical CERCLA sites, the landfill is not releasing significant concentrations of CERCLA hazardous substances. Therefore, an evaluation of remedial alternative, as described in CERCLA, was not appropriate for this site.

EPA has concluded that conditions at the Site do not warrant remedial action under CERCLA. It has been determined that the current Site conditions do not exceed EPA's acceptable risk range. In order to ensure that in the future the conditions at the Site will continue to be protective of human health and the environment, EPA recommends that environmental controls be implement and maintain at the Site to address potential problems associated with solid waste disposal. EPA has determined that such actions should not be handled under the Superfund program. Subtitle D of the Resource Conservation and Recovery Act of 1976 as amended by the Solid Waste Disposal Act of 1980 (RCRA) is the Federal statute concerning solid waste landfills, and post-landfill closure monitoring requirements. NJDEP is authorized to regulate solid waste landfill closures and post-landfill closure ground water and surface water monitoring requirements in New Jersey. Current State statutes regulate post-landfill closure ground water and surface water monitoring requirements. For this reason, EPA is transferring this Site to the NJDEP for future action.

Although current site conditions do not exceed EPA's acceptable risk range, this "no action" decision does not constitute a finding that in the future the conditions at the Site will continue to be protective of human health and the environment without

proper maintenance and adherence to post-closure requirements for solid waste landfills.

DOCUMENTATION OF SIGNIFICANT CHANGES

There have been no significant changes in the decision as described in the Proposed Plan.

TABLE 2

Protectiveness Summary
Health Only

Medium		Current Use	Future Use
Soil			
	stream sediment ingestion	2.79×10^{-7}	2.79×10^{-7}
Air			
	gas vent air	NA[1]	2.23×10^{-6}
	gas vent air at 50 meters	9.05×10^{-11}	9.05×10^{-11}
	indoor air	1.74×10^{-5}	1.74×10^{-5}
Water			
	ground water from monitoring wells	NA[1]	5.66×10^{-4}
	surface water	NA[1]	9.52×10^{-7}
Biota			
	fish ingestion	1.59×10^{-8}	1.59×10^{-8}
All MEDIA		1.77×10^{-5}	5.87×10^{-4}

[1] No current exposure pathway.

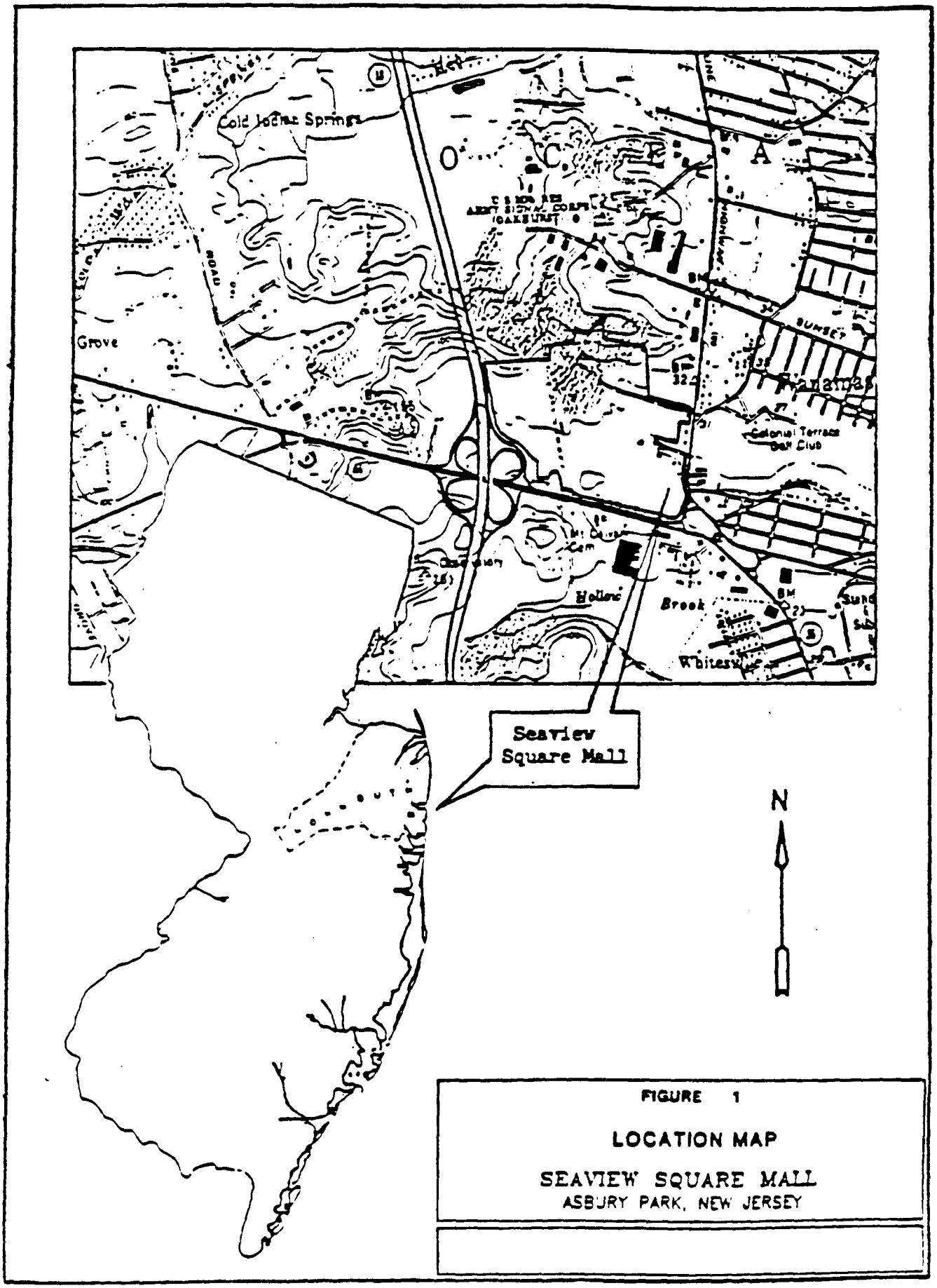
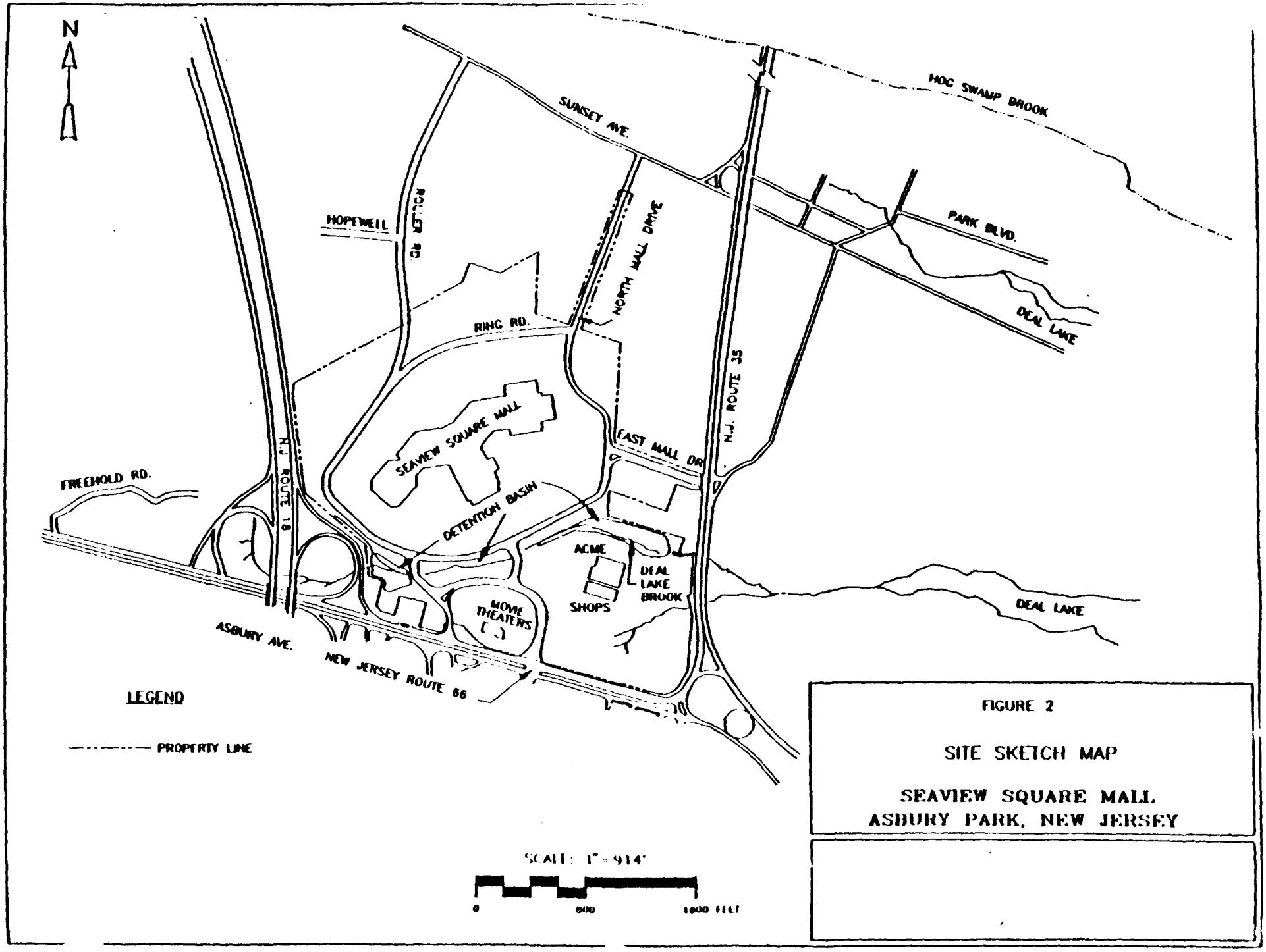


FIGURE 1

LOCATION MAP

SEAVIEW SQUARE MALL
ASBURY PARK, NEW JERSEY


N
SUNSET AVE.
HOG SWAMP BROOK
HOPEWELL
ROUTE 18
NORTH MALL DRIVE
PARK BLVD.
RING RD.
DEAL LAKE
N.J. ROUTE 35
SEAVIEW SQUARE MALL
EAST MALL DR.
FREEHOLD RD.
N.J. ROUTE 18
DETENTION BASIN
ACME
SHOPS
DEAL LAKE BROOK
MOVIE THEATERS
DEAL LAKE
ASBURY AVE.
NEW JERSEY ROUTE 66
LEGEND
PROPERTY LINE
SCALE: 1" = 914'
0
500
1000 FEET
FIGURE 2
SITE SKETCH MAP
SEAVIEW SQUARE MALL
ASBURY PARK, NEW JERSEY

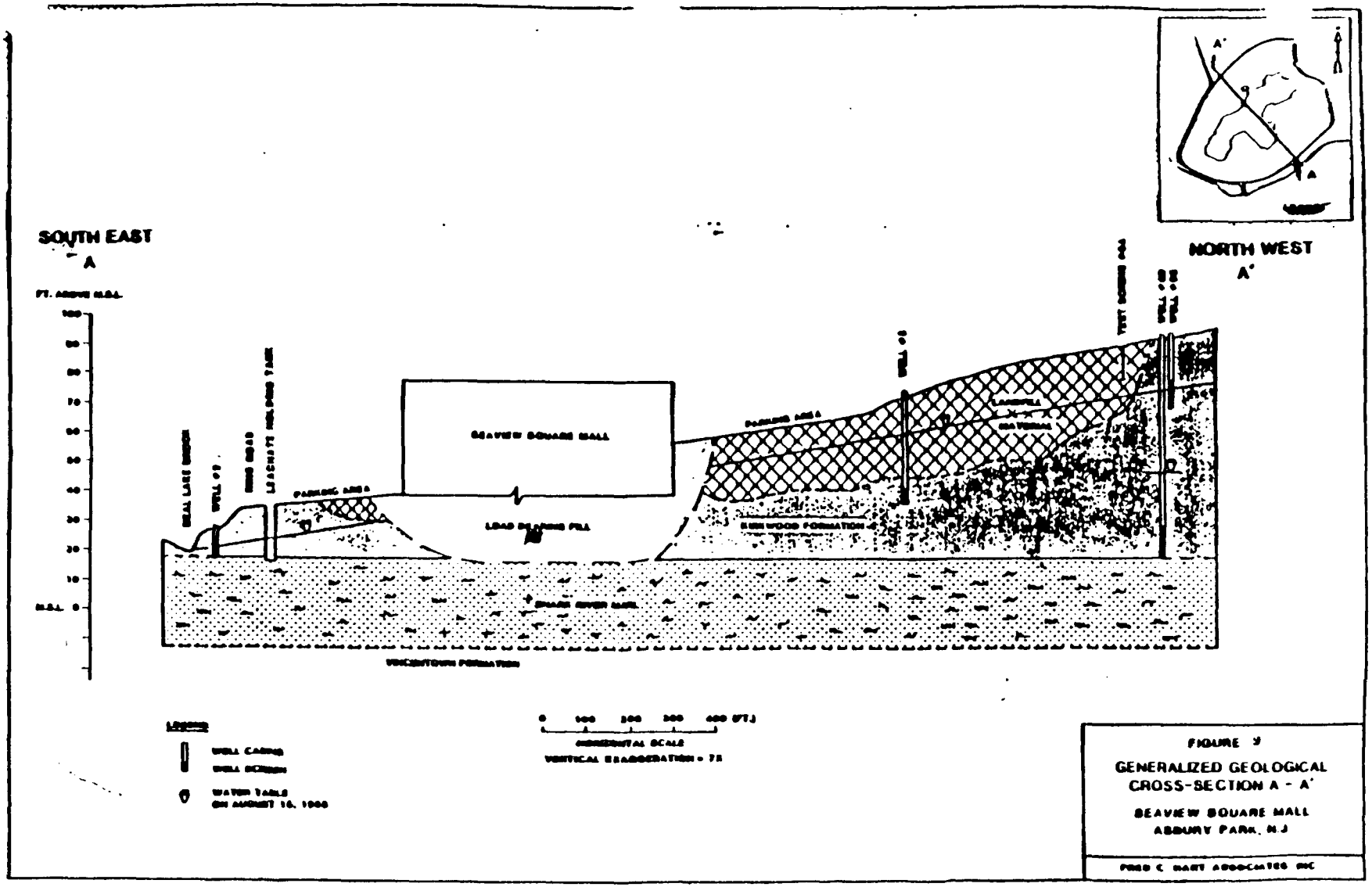


FIGURE 3

GENERALIZED GEOLOGICAL CROSS-SECTION A - A'

BEAVIEW SQUARE MALL
ASBURY PARK, N.J

FRED C. HART ASSOCIATES INC

TABLE 1

RELEVANT INDICATORS OF TOXICITY

CHEMICAL	AIS (mg/kg/day)	AIS (ug/m3)	AIC (mg/kg/day)	AIC (mg/m3)	Carcinogenic Potency Factor 1/(mg/kg/day)
Ingestion Route					
Arsenic	1.00E-03		1.00E-03		1.80E+00
Barium	5.00E-02		5.10E-02		0
Chromium	2.50E-02		5.00E-03		0
Copper	3.70E-02		3.70E-02		0
Iron	0		0		0
Lead	0		0		0
Manganese	5.00E-01		2.00E-01		0
Mercury	3.00E-04		3.00E-04		0
Nickel	2.00E-02		2.00E-02		0
1,1,1-Trichloroethane	9.00E-01		9.00E-02		0
Trichloroethene	0		0		1.10E-02
Zinc	2.00E-01		2.00E-01		0
Inhalation Route					
Benzene	0		0		2.90E-02
Carbon Tetrachloride	0		0		1.30E-01
Chloroform	0		0		8.10E-02
Methylene Chloride	0	3.00E+00	0	3.00E+00	1.40E-02
Toluene	0	2.00E+00	0	2.00E+00	0
1,1,1-Trichloroethane	3.00E+00		3.00E-01		0
Trichloroethene	0		0		1.70E-06
Xylenes	0	3.00E-01	0	3.00E-01	0

Notes: Zeros represent unavailable or inapplicable data

If acceptable intake values for inhalation intake in units of (mg/kg/day) were unavailable, values in concentrations units, (mg/m3), are listed (if available).

AIS and AIC shown for copper correspond to the U.S. EPA suggested intake value of 1.3 mg/l.

References, shown in decreasing priority:

U.S EPA direct comments

U.S EPA Integrated Risk Information System (IRIS)

U.S EPA Health Effects Assessment Summary Tables, Quarterly

U.S EPA Superfund Public Health Evaluation Manual

TABLE 2

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Medium		Current Use	Future Use
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Biota			
	fish ingestion	1.59×10^{-6}	1.59×10^{-6}
All MEDIA		1.77×10^{-5}	5.87×10^{-4}

[1] No current exposure pathway.

TABLE 3 SUMMARY STATISTICS FOR MONITORING DATA

Chemical	Ground Water (monitoring wells)		Ground Water (potable wells)		Surface Water		Sediments	
	Geometric Mean (ug/L)	Maximum (ug/L)	Geometric Mean (ug/L)	Maximum (ug/L)	Geometric Mean (ug/L)	Maximum (ug/L)	Geometric Mean (mg/kg)	Maximum (mg/kg)
Arsenic	11.01	68.00	2.93	5.00			4.22	8.50
Barium	152.23	399.00	145.29	354.00			50.09	211.00
Chromium	26.93	222.00	2.93	5.00	3.62	10.00	10.54	55.00
Copper	14.49	102.00	14.73	73.50	10.88	25.00	7.18	47.80
Iron	18504.40	301000.00	4170.00	4170.00	4316.88	5070.00	11189.40	53000.00
Lead	6.96	230.00	5.01	64.00	2.74	100.00	34.58	110.00
Manganese	122.45	603.00	73.41	124.00	78.38	84.40	14.39	239.00
Mercury	0.15	1.70	0.15	0.88	0.12	0.40	0.09	0.20
Methylene Chloride					2.98	2.50		
Nickel	31.55	146.00	11.70	20.00	11.02	20.00	2.46	6.50
1,1,1-Trichloroethane					3.72	90.00		
Trichloroethene					3.05	14.00		
Zinc	114.66	500.00	109.63	650.00	45.47	170.00	32.08	146.00

Note: Blank spaces are shown for compounds not detected.

(continued)

TABLE 3 SUMMARY STATISTICS FOR MONITORING DATA

COMPOUND	OUTDOOR AIR GEOMETRIC MEAN (ug/m3)	OUTDOOR AIR MAX (ug/m3)	INDOOR AIR GEOMETRIC MEAN (ug/m3)	INDOOR AIR MAX (ug/m3)
ACETONE	8.6	190000.0	5.5	197.8
BENZENE	3.7	850.0	1.1	5.9
BROMODICHLOROMETHANE			0.8	2.0
2 BUTANONE			1.4	15.7
CARBON DISULFIDE	1.7	79.0	2.2	10.6
CARBON TETRACHLORIDE			0.8	2.0
CHLOROBENZENE	2.1	1107.5		
CHLOROETHANE			1.7	10.0
CHLOROFORM	1.8	270.0	1.5	16.1
CHLOROMETHANE			2.0	13.0
DIBROMOMETHANE			1.0	2.0
1,4-DICHLOROBENZENE	2.1	160.1	1.9	24.9
1,2-DICHLOROBENZENE	1.1	43.0		
DICHLORODIFLUOROMETHANE			3.0	26.7
1,1-DICHLOROETHANE	1.5	220.0	1.0	3.5
1,2-DICHLOROETHANE			1.0	5.0
1,2-DICHLOROETHENE (TOTAL			1.2	3.5
TRANS-1,2-DICHLOROETHENE	1.5	12.5		
DICHLORODIFLUOROMETHANE	3.4	2000.0		
ETHYLBENZENE	2.9	480.0	1.3	10.9
META-ETHYLTOLUENE	2.4	96.0	1.0	2.5
HEPTANE	2.1	1265.1		
HEXANE	6.0	9500.0	2.7	29.9
ISOBUTYLENE	4.9	750.0		
ISOPROPYL BENZENE	1.1	71.7		
METHYL ETHYL KETONE	1.3	104.2		
METHYLENE CHLORIDE	1.9	440.0	2.4	61.1
PENTANE	2.7	620.0		
PROPENE	2.6	260.0		
STYRENE	1.7	25.0	1.0	4.3
1,1,2,2-TETRACHLOROETHANE			1.0	7.0
TETRACHLOROETHENE	1.8	18.2	1.1	14.6
TOLUENE	3.7	1100.0	4.3	192.6
1,1,1-TRICHLOROETHANE	1.1	19.6	3.6	58.2
1,1,2-TRICHLOROETHANE			0.9	2.5
TRICHLOROETHENE	1.2	17.8	1.0	3.9
TRICHLOROFLUOROMETHANE	1.9	475.6	2.9	77.3
VINYL CHLORIDE			1.6	10.5
XYLENE (TOTAL)	1.5	79.5	1.7	26.5
M&P-XYLENE	4.3	189.0		
O-XYLENE	3.5	167.0		

BLANK SPACES REPRESENT EITHER NO ANALYSIS PERFORMED OR UNAVAILABLE INFORMATION.

RESPONSIVENESS SUMMARY
FOR THE REMEDIAL ACTION
AT THE M&T DELISA LANDFILL SUPERFUND SITE
OCEAN TOWNSHIP, NEW JERSEY

TABLE OF CONTENTS

I. INTRODUCTION

In accordance with the U.S. Environmental Protection Agency's (EPA) community relations policy and guidance and the public participation requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the EPA Region II office held a public comment period from June 28, 1990 to July 28, 1990, to obtain comments on the Proposed Plan for the M&T DeLisa Landfill Superfund site (the Site) in Ocean Township, New Jersey. The Site covers 132 acres of which approximately 39 acres consisted of a private solid waste landfill which operated from 1941 to 1974. Currently the Seaview Square Mall Complex is located on the Site. On July 12, 1990, EPA and the New Jersey Department of Environmental Protection (NJDEP) held a public meeting to receive public comments on the Proposed Plan. Approximately 30 community residents and interested persons attended the meeting. Copies of the Proposed Plan were distributed at the meeting and placed in the information repositories for the Site.

Public comments received during the comment period are documented and summarized in this Responsiveness Summary. Section II presents a summary of questions and comments expressed by the public at the July 12 public meeting. All questions and comments are grouped into general categories, according to subject matter. Each question or comment is followed by EPA's or NJDEP's response.

II. PUBLIC MEETING COMMENTS

This section contains questions and comments presented at the July 12, 1990, public meeting. Comments contained in this section are grouped according to subject discussed.

A. Remedial Investigation Findings

1. **An environmental consultant for the Deal Lake Commission presented the Commission's comments on the RI. In general, the Commission believes that the Site has a significant impact on Deal Lake, and that EPA should further investigate potential effects of the Site on biota in the lake. The Commission's specific comments included the following:**

   - **The RI includes very little sampling of nutrient concentrations associated with leachate discharging into Deal Lake. A 1983 EPA Clean Lakes Diagnostic Feasibility Study had concluded that Deal Lake Brook, downstream of Seaview Square Mall, consistently contained ammonia and nitrogen at levels at least 10 times greater than those measured in other streams in the area. The Deal Lake Commission believes that EPA should investigate this.**

   - **The Deal Lake Commission believes that the landfill is leaching into the lake and perhaps increasing the rate of eutrophication. The portion of the lake near the Site has had an extremely high concentration of algae and other types of aquatic life, which the Commission feels can be attributed to the landfill.**

   - **The Deal Lake Commission is concerned about the potential effects of metals in the lake. Independent observations of orange-brown floc, caused by iron precipitation, an indication of leachate running into surface water, were made in Deal Lake Brook near the Mall. In addition, sediment seep samples that were collected down-gradient from the Site during the RI contained some of the highest concentrations of metals found. The Commission is concerned that, although the RI concluded that the metal concentrations in the lake (copper in particular) do not pose a risk to humans, they may accumulate and be toxic to aquatic life in the lake.**

EPA Response: EPA is recommending further monitoring and the maintenance of some of the environmental controls that were put in place during construction of the mall. However, it is necessary to distinguish between activities that EPA can

implement under Superfund and those that must be taken under other environmental laws and regulations. CERCLA, the Superfund law, mandates that EPA respond to releases of hazardous substances. That limits the actions that the Agency can take under Superfund. EPA cannot address the potential effects of non-hazardous substances, such as nutrients in the lake, nitrogen, and iron precipitation, which are outside of the scope of CERCLA. Consequently, EPA has requested that NJDEP assume the lead for future site activities connected with the Site.

2. **The consultant for the Deal Lake Commission asked whether any bio-assays were conducted during the risk assessment to study chronic effects on biota.**

   EPA Response: No, the endangerment assessment did not include any such studies. The endangerment assessment examined potential health-based risks to humans from potential exposures to Site substances. These include ingestion of fish from the pond. Since the risk attributable to the Site from consumption of fish is within an acceptable range, EPA believes there is no need to perform bioassays under the auspices of the Superfund program.

3. **A Congressional aide asked whether the arsenic found in well water at the Site during the RI could indicate that agricultural chemicals and pesticides were disposed at the Site during the 1950s.**

   EPA Response: EPA has no records of disposal of pesticides in the landfill. In addition, samples were analyzed for the presence of pesticide compounds. No pesticide compounds were found.

4. **The Congressional aide referred to the RI results which detected arsenic in unfiltered well samples but not in filtered samples and asked whether the conditions of both tests were the same. He also asked whether any further testing had been conducted to confirm the results of these tests.**

   EPA Response: Both filtered and unfiltered samples were taken under the same conditions and from the same bailer. A groundwater sample retrieved from a monitoring well is immediately split into two samples at the well site. The unfiltered sample goes directly into a sampling bottle; the filtered sample is poured into a sampling bottle through a pre-cleaned barrel filter unit with a disposable 0.45 micron membrane filter disk. We were unable to confirm the levels of arsenic found in our 1984 sampling event in our subsequent sampling efforts in 1988. We are aware of no

other sampling efforts.

5. **One area resident asked whether there is any risk to fishermen who eat fish caught in Loch Harbor (Deal Lake).**

   EPA Response: EPA evaluated risks to human health from consuming fish attributable to hazardous substances emanating from the Site as part of the risk assessment. The findings are that any risks associated with consuming fish potentially affected by the Site are within the range that EPA has determined to be acceptable.

6. **A local official expressed concern that EPA does not know what is in the landfill because its contents were not tested during the RI.**

   EPA Response: No systematic sampling of the refuse material was done by EPA. However, during the design phase for construction of the Mall, 58 test borings were drilled, most into the landfill material. The test borings disclosed the refuse fill to consist of layered brown to black sand with paper, rags, wood, metal, concrete, and assorted organic material. Approximately 800,000 cubic yards of refuse material was excavated for construction of the Mall. There was no evidence during these excavations or the test borings of the presence of hazardous substances. EPA in subsequent investigations collected samples from the formation underneath the refuse in the landfill. Hazardous substances were not detected in significant concentrations in these samples. No borings were drilled through the clay liner surrounding the Mall. It was decided not to puncture the clay to preserve its integrity as a barrier to leachate flow.

7. **A resident asked whether the RI investigated the presence of aromatic hydrocarbons at the Site, because State-conducted testing downstream from the Site, along Fairmont Avenue, found the presence of aromatics whose source is unknown.**

   EPA Response: Samples collected during the RI were analyzed for a long list of substances, including aromatic hydrocarbons; none were found on or associated with the Site.

8. **A Monmouth County official asked whether groundwater samples had been collected south of Route 66 and stated that the County had sampled storm drains there and had found ground water with a leachate-like appearance and elevated chloride levels.**

EPA Response: One potable well PW-D located next to Route 66 on the south side of the highway was sampled in our 1984 sampling event. We detected no hazardous organic compounds in our sampling. Several metals were detected in this well in unfiltered samples. EPA did not test for chlorides. It should be noted that located south of Route 66 is the Neptune Municipal Landfill which may potentially impact surface water bodies in the area.

B. Proposed Plan and Future Site Actions

1. **The consultant for the Deal Lake Commission stated that the Commission feels that, although the State is fully capable of overseeing proper closure activities, EPA should remain involved with the project to ensure that all environmental impacts associated with the Site are addressed. He also suggested that EPA take some steps to pre-treat leachate before its release into Deal Lake and suggested that EPA modify a series of detention basins on the Seaview Square Mall site for this purpose.**

EPA Response: (Developed from EPA response at the meeting) EPA based its decision to refer this site to NJDEP upon a review of historical documentation which did not reveal any past disposal of hazardous waste at the Site, the results of the RI which demonstrate that the landfill is not a source of significant concentrations of any hazardous substances and a conservative assessment of risk attributable to the release of hazardous substances, from the Site which indicates that the current risk posed by the Site is within an acceptable range. With respect to improving the design of the detention basins, EPA is recommending that NJDEP investigate the series of detention basins to determine if modification is warranted.

2. **A Congressional aide stated that the selected alternative would involve delisting the M&T Delisa Landfill Site from EPA's National Priorities List (NPL) and place it under State jurisdiction. He asked how the State will be able to fund the required activities and when the State NJDEP would be able to address the Site. He expressed concern that EPA could be shifting responsibility to the State, knowing the State could not effectively deal with the Site.**

EPA Response: (Developed from State response at the meeting.) Solid waste landfill closure will be a State responsibility. The State of New Jersey does not have funding to give to municipal landfills for closure, but requires the owner of record to provide financial assurances and fund any activities required for proper landfill closure and long-term maintenance. State regulations require a

post-closure maintenance period from 30 years after the landfill has closed. Since the landfill was closed in 1975, this would mean that post-closure activities at the Site would have to be conducted until the year 2005. The State, however, has the latitude to require monitoring activities for a longer period of time; conversely, if the monitoring indicates that no problems are occurring, such as no surface or ground water contamination or methane gas migration, the State could decrease the time that post-closure monitoring would be required.

3. **A Congressional aide expressed concern that Federal and State money has been used to address the nutrient content of Deal Lake and its biological effects. He stated that the source of the leachate that is adding nutrients to the lake should be identified and prevented from entering the lake before it creates these problems.**

EPA Response: EPA agrees, however, CERCLA is not the appropriate vehicle to address all non-hazardous contaminant sources to Deal Lake.

4. **Several meeting attendees asked what portion of the projected costs of future actions the one responsible party who has been identified will have to pay and what their role will be in these actions. One person asked EPA to identify the responsible party.**

EPA Response: (Developed from State response at the meeting.) The responsible party is the current property owner, in this case Equitable Real Estate Investment Management, Inc. The State is still determining how it will ensure that the responsible party complies with State landfill post-closure regulations. NJDEP has the authority to require the property owner to monitor the Site and maintain the leachate collection, monitoring well, and gas vent systems until such time as the State is completely satisfied that the landfill does not pose a potential threat.

5. **A local official asked what the State's position is on transferral of responsibility for the landfill from EPA and several meeting attendees asked what specific actions the State will take at the Site in the next 10 to 15 years.**

EPA Response: (Developed from State response at the meeting.) The State concurs with EPA's recommendation to transfer responsibility of the landfill to NJDEP. The State is proposing that monitoring of the Site is more appropriate than remedial action. Therefore, the cost of the proposed actions will be less than remedial response. The identified responsible party will be involved in conducting and/or

paying for the proposed monitoring actions although the exact mechanisms that NJDEP will use to ensure that the responsible party complies with requirements have yet to be decided. However, the kinds of post-closure actions that the State has the authority to require the landfill owner to take are similar to the controls that are currently in place; the parking lot serves as an impermeable cover and the Site has leachate control and gas venting systems. In addition, NJDEP has the authority to require the owner to maintain these systems for a 30-year period, which in the case of the Site would be some time in the early part of the next century.

6. **A local official asked whether EPA would be able to take action if, some time in the future, monitoring indicated that a hazardous waste problem exists at the M&T Delisa Landfill site. He stated that he is concerned that leachate may only have been minimized and the spread of contamination slowed by the liner and the parking lot, but that in the future leachate may overflow from the landfill and start to move into the environment.**

EPA Response: At the public meeting, EPA stated that if the post-closure monitoring reveals that a problem exists, the Site could be renominated to the NPL. After renomination, EPA could then take actions. If an emergency situation occurs where an imminent threat to human health or the environment occurs, EPA can take removal actions to protect people in the area and mitigate the hazardous substance release. Pursuant to 40 CFR Section 300.425 (e) (3), "sites deleted from the NPL are eligible for further Fund-financed remedial actions should future conditions warrant such action. Whenever there is a significant release from a site deleted from the NPL, the site shall be restored to the NPL without application of HRS." Consequently, the site would not have to be renominated to the NPL.

7. **A local official noted that some of the concerns voiced at the meeting seem to be outside of the scope of the Superfund program, and asked whether the State could address them if it assumes responsibility for the Site. The official also asked whether NJDEP could require the Site owners to implement additional measures to prevent damage to Deal Lake.**

EPA Response: (Developed from State response at the meeting.) If the State determined that there was a need to redesign some of the existing environmental controls, the State has the authority to require the owner to take the additional actions. The property owner could be required to conduct monitoring of soil, sediments, and other environmental media to determine if a potential problem

exists. NJDEP also may involve other authorities within the State, such as the Soil Conservation District, if an issue falls within their jurisdiction.

8. **A local official asked, if the Site remains under EPA jurisdiction, whether NJDEP would be able to address concerns that would be outside the scope of the Superfund program.**

EPA Response: (Developed from State response at the meeting.) The NJDEP Division of Solid Waste Management (SWM) cannot; it does not have jurisdiction for sites listed on the NPL. The SWM cannot have exercise authority to require any remediation or control until completion of the CERCLA remedial process. However, other divisions within NJDEP may have the authority to respond to specific problems, under other state laws and regulations such as the New Jersey Spill Compensation and Control Act or the Water Pollution Control Act.

C. Site History and Current Status

1. **One local official asked whether records are available on past disposal practices at the M&T DeLisa landfill or whether EPA knows what substances were disposed these.**

EPA Response: There is very limited information available on the types of wastes that were disposed in the landfill. EPA knows that construction debris and refuse were disposed of at the Site, but has no record of hazardous substances being disposed there.

2. **A resident commented that it is impossible to know what substances were disposed in the landfill because it was very casually run when it was in operation and allowed unrestricted access at all time.**

EPA Response: (Developed from State response at the meeting.) EPA and the State realize that there is no information on exactly what was disposed at the Site. Based on investigations, however, there are no indications that any large quantity of hazardous substances was disposed of there. If any releases of hazardous waste occur in the future, monitoring conducted as part of the State post-closure program should detect them and allow remedial action to be taken.

3. **A local official asked whether the landfill was privately owned during its period of operation.**

EPA Response: The landfill was privately owned, but EPA believes that municipal waste was disposed of there.

4. **Several meeting attendees asked about the leachate collection tank currently operating at the Site. Questions asked included whether the tank is tested periodically, whether the tank will be tested if NJDEP assumes responsibility for the Site, and how large the tank is.**

EPA Response: (Partially developed from State response at the meeting.) The tank is not tested periodically; it was tested twice during the RI. If the State assumes responsibility for the Site, it will ensure that all systems present, including the leachate collection tank, are monitored and properly maintained; however, under State regulations regular testing of this kind has not been done in the past.

5. **Several meeting attendees asked whether the practice of periodically emptying the leachate collection tank into the Ocean Township sanitary sewer is safe, whether the treatment plant can effectively remove harmful substances from the leachate, and whether the Township is notified when water will be dumped.**

EPA Response: Periodically emptying the leachate collection tank into the sewer should not have a negative effect on sanitary operations. The volume of leachate in the tank is only a minor fraction of the volume of waste typically treated. The Ocean Township Sewerage Authority indicates that approximately 10,000 to 30,000 gallons per day of leachate discharge into the sanitary sewer from the leachate collection tank. Guidelines and limitations for the discharge of effluent from the waste-water treatment plant are are set in the facility's permit.

6. **The consultant for the Deal Lake Commission asked whether a portion of the landfill lies north of Ring Road and whether that portion of the landfill is unpaved. A local official asked whether a considerable amount of water was entering the landfill by this route.**

EPA Response: A portion of the old landfill, approximately 9 acres, does lie north of Ring Road and is not paved. Some water is entering the landfill in this manner. It is not possible to entirely prevent water from entering the landfill, however, leachate generated by this water is being collected in the leachate collection system.

7. **A local official asked whether the mall would have been allowed to be built or would have been built differently if the M&T DeLisa landfill had been identified as a Superfund**

site at the time.

EPA Response: The protective environmental measures constructed have been effective in controlling environmental degradation by the landfill. EPA has no reason to believe that they are not working. The RI has shown that there are no detectable levels of air contaminants within mall buildings that can be attributed to the landfill, which was a major concern. The parking lot appears to be acting as an impermeable cover that prevents infiltration of rainwater which would create more leachate. The leachate that is generated is being collected. Capping and leachate collection are standard technologies used in landfill closure. Because EPA's concern is that the existing control measures continue to be properly maintained, EPA is recommending to NJDEP that the air vents, leachate collection and monitoring systems, and surface water monitoring be continued.

8. **A local official asked whether the M&T Delisa landfill is currently a Superfund site, and if so, does that mean that sufficient environmental problems were present to make it eligible for the list. He also asked where the Site is ranked on the NPL.**

EPA Response: Yes, the M&T Delisa landfill is currently on EPA's NPL. When EPA initially evaluated the Site in 1983, there were indications of possible environmental contamination and sufficient numbers of people who used the ground water who were potentially at risk to warrant further study. Therefore, the Site was placed on the NPL. Subsequently, after the RI was completed, EPA concluded that the Site could safely be deleted from the list. Sites on the NPL are assigned a numerical score, but the score is an indication of the numbers of people who are potentially affected and the types and amounts of substances that are present on the site rather than of their relative potential hazard. The Site is currently ranked in the low range of the 109 sites in New Jersey that are on the list.

D. General Comments

1. **One commenter asked why the Administrative Record file for the Site was placed in the Neptune Library instead of the Ocean Township Library.**

EPA Response: EPA contacted the librarian at the Ocean Township Library, but was informed that the library did not have sufficient space to accommodate the Administrative Record for the Site. The file was placed in the Neptune Library because it had the available space and is located

closer to the Site than other possible facilities, such as the Ft. Monmouth Federal Depository.

2. **A Monmouth County official stated that leachate in the area of Steinbeck's parking lot is bypassing the leachate collection system. He added that samples that the County has collected in the area have contained high levels of ammonia and asked that the leachate collection system be repaired.**

   EPA Response: Data gathered during the RI indicates that no significant contamination from hazardous substances is attributable to the Site. While some leachate may be bypassing the collection system, our data indicates that the impact of hazardous substances is negligible. Currently, EPA does not believe that the leachate collection system should be redesigned, however, NJDEP has the authority to require modifications if any are determined to be necessary.

3. **A resident commented that aromatic hydrocarbons detected in surface water on Fairmont Avenue have a gasoline odor and oily appearance and, although their source has not been found, appear to be in line with the landfill.**

   EPA Response: (Developed from State response at the meeting.) At the present time, NJDEP believes that the source of these substances is not connected with the Site. Currently, a NJDEP investigation is proceeding under the Environmental Cleanup and Responsibility Act (ECRA) to determine the source of the contaminants observed in the area of Fairmont Avenue.

4. **A local official asked in which directions the aquifers potentially affected by the Site flow.**

   EPA Response: Results from tests conducted during the RI indicate that in the vicinity of the Site, the Kirkwood aquifer flows to the southeast toward Deal Lake Brook, and the deeper Vincentown aquifer flows to the east-southeast toward Deal Lake. These aquifers may have different flow patterns in other areas.

5. **The consultant for the Deal Lake Commission stated that the Commission has received Federal, State, and local government funds to dredge sediment from the area of Deal Lake that is affected by metal runoff from the landfill. The Commission is concerned that the sediments they dredge may contain metal concentrations that exceed landfill disposal standards and would need to find alternative disposal sites, thereby increasing the cost of the dredging. For that reason, the Deal Lake Commission feels that EPA involvement should continue.**

EPA Response: Contaminants found at the Site are indicative of solid waste landfills. Unlike typical EPA Superfund sites, the landfill is not releasing significant concentrations of CERCLA hazardous substances. Although remedial action under CERCLA is not warranted, EPA recommends that environmental controls be implemented and maintained at the Site to address potential problems associated with solid waste disposal. Current State statutes regulate post-landfill closure ground water and surface water monitoring requirements. For this reason, EPA is transferring this Site to the NJDEP for future response action. EPA has the authority to address the Site at any time if EPA believes that the Site posses an imminent threat to human health or restore the site to the NPL if warranted.

6. **A local official asked NJDEP whether it has assumed responsibility for other landfills in the State.** Response: (Developed from State response at the meeting.) The State has not assumed responsibility for a closed landfill that has been delisted from the NPL. However, NJDEP is responsible for overseeing nearly 270 other municipal and private facilities in New Jersey.

III. Response to Written Comments

Dr. Stephen J. Souza of Coastal Environmental Services, Inc., on behalf of the Deal Lake Commission, objected to any conclusions made by the EPA or NJDEP that the Site has not or does not continue to impact the water quality and biota of Deal Lake. Dr. Souza, also on behalf of the Deal Lake Commission, believes that EPA should continue to list the Site as a Superfund site and that EPA should not relinquish responsibility or supervision of the Site to the NJDEP. He based his objections to the Proposed Plan on the following.

1. **Water quality samples collected from Deal Lake Brook (at the Route 35 overpass) during a 1983 study of Deal Lake had ammonia-nitrogen concentrations 10 times higher than that measured in other streams not effected by landfill activities. Associated with this leachate was a floc, apparently caused by iron, that formed a matt along the upper reaches of Deal Lake Brook. Until the leachate collection system is redesigned to intercept all leachate, this problem will persist and the lake's water quality and biota will continue to be impacted.**

EPA Response: An extensive sampling effort was done during the RIs of 1984 and 1988. From those studies, we found low to non-existent levels of hazardous substances in Deal Lake

Brook. Our conclusion was that the Site was not releasing significant concentrations of hazardous substances which would result in degradation of Deal Lake Brook or Deal Lake. Contaminants such as ammonia and iron are indicative of solid waste landfills. Unlike typical CERCLA sites, the landfill is not releasing significant concentrations of CERCLA hazardous substances. At the present time, EPA does not believe that the leachate collection system should be redesigned, however, NJDEP has the authority to require modifications if any are determined to be necessary.

2. **The USEPA's sampling program to investigate sediment contamination was inadequate. The data cannot be used to statistically verify that no environmental risk exists to Deal Lake Brook or that Deal Lake has not been impacted by heavy metals that migrated from the landfill. In addition, the sample collection technique (sediment scoop) would not be effective in obtaining sub-surficial sediments since there was a tremendous influx of soil from the Site during construction between 1975-1979. Much of the disturbed contaminated soils could be actually below the surficial samples collected in 1984 or 1989. Therefore, the data may in fact be non-representative of actual levels of sediment contamination. A corer or a penetrating dredge appears to be a more appropriate sampling method given the Site's history of soil erosion. As such, the USEPA's conclusion that no impact has occurred to the sediments of Deal Lake Brook or Deal Lake should be reconsidered. At a minimum, additional sampling, using appropriate sampling techniques, should be conducted of the sediments of Deal Lake and Deal Lake Brook.**

   EPA Response: EPA believes that the sampling technique was appropriate to determine contaminant levels in stream sediments. One would expect to see contamination, if present, reflected in current stream sediments. The tremendous influx of soil during the late 1970's mentioned above may actually dilute levels of contaminants, while the normal depositional process may concentrate them. EPA has recommended to NJDEP that they continue monitoring the surface water to be sure that contamination does not enter the brook.

3. **The environmental risk assessment did not include any actual analysis of tissues from organisms residing in the sediments or waters of Deal Lake or Deal Lake Brook. The conclusion of no potential risk associated with the consumption of fish from Deal Lake is not fully substantiated. At a minimum, actual tissue samples from plants, benthos, and fish should be analyzed.**

EPA Response: EPA believes that a full scale bio-assessment, while possibly appropriate to define levels of bio-contamination in Deal Lake, would not be useful in defining contamination attributable to hazardous substances from the Site that may have affected biota. Our sampling of ground and surface water indicates that no significant hazardous substances are impacting local surface water bodies. It is reasonable to conclude from this data that biota is not being affected by hazardous substances attributable to the Site. EPA's risk assessment evaluated the potential risk associated with bio-accumulation in fish from contaminants attributable to the Site. This evaluation indicated a low potential risk, below federal risk levels, for consumption of fish by humans.

4. **The USEPA failed to consider the use of storm-water basins located in the Sea View Square Mall Site, upstream of Deal Lake Brook, as a means of passively treating leachate that bypasses the leachate collection system. The basins would need to be regraded and retrofited with new outlet control structures.**

   EPA Response: EPA will incorporate this suggestion into our recommendations to the NJDEP.

5. **Approximately 25-30% of the Site is not capped. Rainfall continues to percolate through these non-capped sections and create leachate. Thus the landfill can not be considered to be properly closed. Actions should be mandated by the USEPA to properly cap the remaining sections of landfill in order to alleviate leachate contamination problems.**

   EPA Response: Areal photographs of the landfill indicate that it was roughly 39 acres in size, the Mall and surrounding parking lot cover approximately 30 acres of the landfill (77%). The landfill was operated from 1941 until 1974 with a permit from NJDEP, and was subsequently closed before the construction of the Mall. The 9 acres which are not covered by the mall, have been cleared, graded, capped with natural soils, and re-vegetated. Under NJDEP regulations at the time, the landfill was properly closed. EPA believes that the present leachate collection system is performing adequately to reduce the flow of leachate into Deal Lake Brook.

Mr. John J. Iannone, P.E., of Fred C. Hart Associates, Inc., on behalf of the Equitable Real Estate Investment Management, Inc., indicate their concurrence with the Proposed Plan.

IV. COMMUNITY RELATIONS ACTIVITY CHRONOLOGY

- The Remedial Investigation Reports, the Endangerment Assessment, the Proposed Plan and other documents which comprise the Administrative Record for this Site were released to the public for comment on June 18, 1990. These documents were made available to the public at the EPA Region II Docket Room in New York City and at the Neptune Township Public Library in Neptune Township, New Jersey.

- On June 28, 1990, EPA published a notice in the Asbury Park Press which contained information relevant to the public comment period for the Site, including duration of the public comment period, date of the public meeting, and availability of the administrative record.

- The public comment period began on June 28, 1990 and ended on July 28, 1990.

- EPA issued a press release on July 3, 1990, to announce the availability for comment of the Proposed Plan.

- A public meeting was held on July 12, 1990, where representatives from EPA and the NJDEP answered questions regarding the Site and the decision under consideration. Approximately 30 people attended, including citizens, elected officials, and representatives of the potentially responsible party.

Superfund Proposed Plan

M & T DeLisa Landfill Site
Ocean Township, New Jersey

EPA
Region 2

JUNE 1990

PURPOSE OF THE PROPOSED PLAN

This Proposed Plan describes the preferred alternative for addressing potential air, surface water, and ground water contamination at the M & T DeLisa Landfill site (Site) in the Ocean Township of Monmouth County, New Jersey. This document is issued by the United States Environmental Protection Agency (EPA), the lead agency for site activities, and the New Jersey Department of Environmental Protection (NJDEP), the support agency. Only after the public comment period has ended and the information submitted during this time has been reviewed and considered will EPA, in consultation with NJDEP, make a decision as to what action(s) to take at this Site.

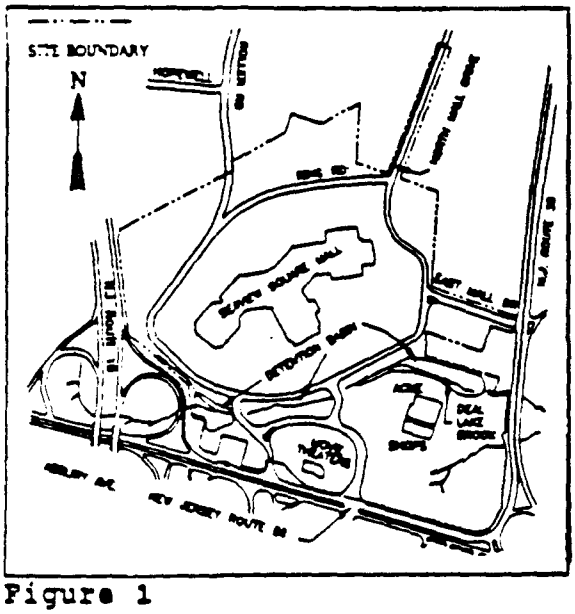

Figure 1

EPA is issuing this Proposed Plan as part of our public participation responsibilities under Section 117(a) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This Proposed Plan summarizes information that can be found in greater detail in the remedial investigations conducted by Fred C. Hart Associates, Inc., for the Equitable Real Estate Investment Management, Inc., under Administrative Orders on Consent issued in November of 1983 and March of 1988 and other documents contained in the administrative record file for the Site.

In addition, EPA has conducted an endangerment assessment which was completed in February of 1990. This document evaluated data from the remedial investigations and other information regarding potential risks to public health and the environment from the Site. The endangerment assessment is used to determine the baseline risk attributable to hazardous substances that may be released from the Site (i.e., the risk posed by the Site before any actions to mitigate the contamination are taken).

EPA and NJDEP encourage the public to review these and other documents in the administrative record in order to gain a more comprehensive understanding of the Site and the related Superfund activities conducted to date. The administrative record file contains the information upon which a decision will be based. The file is available at the following locations:

Neptune Township Public Library
25 Neptune Blvd.
Neptune Township, New Jersey

and

U.S.E.P.A. Region II
Emergency & Remedial Response
Division File Room
26 Federal Plaza 29th Floor
New York, New York 10278

EPA, in consultation with NJDEP, may modify this Proposed Plan based on new information or public comments. Therefore, the public is encouraged to review and comment on this Proposed Plan.

SITE BACKGROUND

The Site is located in the southeastern corner of Monmouth County, northwest of the City of Asbury Park in Ocean Township, New Jersey. The 132-acre Site is bounded on the west by Route 18, on the south by Route 66, on the east by Route 35, and on the north by an industrial park located off Sunset Avenue (see Figure 1). The parcel contains three major building complexes, the Seaview Square Mall complex (Mall), the Seaview Movie Theater complex, and the Acme Supermarket, each of which is surrounded by a paved parking area. The only wooded portions of the parcel are located in the southeast corner of the Site and south of the Route 35 mall access road. Immediately south of the Mall and located on the Site lays the most southern arm of Deal Lake Brook which flows from west to east to Deal Lake.

The former M & T DeLisa landfill, which was covered with a natural soil cap supporting a moderate growth of vegetation, occupied approximately 39 acres of the 132-acre Site. The Mall and its parking areas cover approximately 30 acres of this former landfill. The landfill was in operation from 1941 until 1974 under a NJDEP permit. After the landfill was closed in 1975 an investigation of the landfill area was undertaken by Woodward-Gardner and Associates, Inc., for the Goodman Company, who developed the parcel for Equitable Real Estate Investment Management, Inc., a present owner of the Site. The results of the investigation were detailed in a report which recommended control measures to protect against the possible impact of gas and/or leachate generation from the landfill and described other measures that would be needed to provide a stable soil for the construction of the proposed buildings. These recommendations were incorporated into the design and construction of the Mall which was completed in 1977.

The elements of Mall construction which were implemented to provide environmental controls, which include refuse movement, gas control and leachate control, are summarized below:

Refuse Movement. The refuse material was found to be unsuitable for building support, therefore the refuse material situated under the planned Mall was removed. The refuse was excavated down to the underlying Shark River Marl. Then it was placed in areas which already contained refuse. The area excavated was replaced with clean fill which was capable of supporting the buildings. In addition 3 to 10 foot thick clay side walls (liner) were installed during construction to prevent landfill gas migration into the buildings. The result was that the buildings are constructed within a low permeability soil configuration composed of a naturally occurring confining layer, the Shark River Marl, beneath the Mall and the clay side liner.

Landfill Gas Control. Three measures were implemented to control the potential movement of landfill gas into the Mall. The first was the installation of the clay liner discussed above. The second was the construction of passive control vents, which consist of perforated horizontal collection pipes located in the refuse attached to vertical pipes open to the atmosphere, which provide a preferred pathway for landfill gas migration and help prevent horizontal migration into the buildings. The last measure was to limit the permeability of the Mall's outer utility corridors (which contain sanitary sewers, electrical wiring, etc.) by placing all utility lines within one narrow corridor, replacing refuse in this corridor with clean soil, and compacting the soil to reduce permeability. Utilities which could not be placed within this corridor were

enclosed in concrete.

Leachate Control Leachate is generated when rainfall infiltrates into the ground and percolates through refuse material, or when ground water moves horizontally through the refuse. Four measures were implemented to minimize the generation of leachate: surface capping of the landfill, modifications to the storm water system, construction of a leachate collection system, and installation of a clay liner. The manner in which these measures were implemented is described below:

- The Mall buildings and surrounding parking lot, along with the natural soil covering remaining on undisturbed portions of the landfill, act as a low permeability cap reducing the volume of rainwater which is available for leachate generation.

- The storm water system was designed to keep storm water separate from leachate by, 1) using the parking lot as a low permeability cap to provide a barrier between storm water runoff and leachate, 2) constructing catch basins and storm drain pipes as close to the surface as possible, and 3) constructing storm water pipes which are designed to be impermeable so that the storm water collection system would not act as a conduit for leachate migration.

- A leachate collection system consisting of a perforated pipe within a gravel trench situated to intercept ground water/leachate moving toward Deal Lake Brook was also installed; the liquid is then collected and pumped to the sanitary sewer system for treatment at the municipal waste water treatment plant.

- The clay liner, which was installed between the refuse and clean soil fill, acts as a barrier to ground water/leachate flow, preventing it from migrating to or under the Mall buildings.

REMEDIAL INVESTIGATION SUMMARY

Pursuant to Administrative Orders on Consent of November 1983 and March 1988, between EPA and Equitable Real Estate Investment Management, Inc., Fred C. Hart Associates, Inc., was retained to conduct a remedial investigation at the Site. The objectives of the remedial investigation were to characterize the nature and extent of any contamination associated with the Site, to identify migration of contamination and its impact on public health and the environment, and to determine whether there is a need for remedial measures to protect human health and the environment. The remedial investigation was conducted under two distinct investigatory programs. The initial investigation was completed in June of 1984, while the supplemental remedial investigation was completed in January of 1989.

The investigations evaluated air, surface water/sediment, and ground water quality. The air quality investigations were conducted in November/December of 1983, June of 1984, August of 1988, January of 1989, and October of 1989. Samples were collected at all outdoor vents and in all accessible indoor areas of the lower levels of the Mall buildings. The surface water/sediment sampling effort in the initial investigation included six sampling locations. Due to updated information on surface water flow, three further areas were sampled in the second investigation. With respect to the ground water investigation a total of 7 ground water monitoring wells were installed to determine the geologic and hydrologic conditions underlying the Site. These wells were then sampled along with 4 private domestic water supply wells located within one-half mile of the Site to determine if the landfill has impacted the local ground water.

Upon completion of the investigations, the following conclusions were reached.

- The three uppermost geologic formations underlying the Site are (in descending order): the Kirkwood Formation - consisting of alternating layers of sand, silt and clay that are discontinuous both laterally and vertically; the Manasquan Formation

(which is locally known as the Shark River Marl) - consisting of laterally extensive, low permeability, clayey sands and silts; the Vincentown Formation - consisting of a fine to medium grained sand which represents a viable source of potable water in the vicinity of the Site.

- Groundwater quality in the local shallow Kirkwood aquifer immediately underlying the Site and in direct physical contact with landfill materials, does not appear to have been significantly impacted by the Site. This conclusion is based on the following. Arsenic was detected in unfiltered on-site monitor wells only, with the arsenic being found in up-gradient as well as down-gradient locations. In a subsequent round of sampling no significant concentrations of arsenic were found either on or off the Site.

- Due to the absence of any significant water quality degradation in the shallow Kirkwood aquifer, together with the laterally extensive presence of the Shark River Marl which locally serves as a confining layer below the Kirkwood aquifer, groundwater quality in the deeper Vincentown aquifer is not anticipated to be at risk as a result of past disposal practices at the Site.

- Surface water and sediment samples collected did not find any significant environmental quality degradation at the down-gradient surface water locations.

- Although landfill gas is being generated at the Site, and there is evidence of slightly elevated levels of volatile organic compounds (VOCs) inside the Mall along the unventilated northern edge, the landfill itself is not a source of detectable levels of VOCs. Concentrations of VOCs in the Mall are not outside the range of VOC concentrations typically found in other public and private indoor spaces.

SUMMARY OF SITE RISKS

An endangerment assessment was conducted by EPA to determine the baseline risk attributable to the hazardous substances that may be released from the Site. The assessment began with selecting indicator chemicals which would be representative of the Site risks. Chemicals were selected for each media to ensure that all potential exposure routes could be evaluated. Then environmental fate and transport mechanisms were evaluated for each of the indicator chemicals. The following six exposure routes were assessed: 1) inhalation of indoor air, 2) inhalation of air from gas vents both directly from the exhaust and at 50 meters from the exhaust, 3) ingestion of surface water sediments, 4) ingestion (consumption) of fish, 5) ingestion of surface water, 6) ingestion of ground water from monitoring wells and from local potable wells. Current as well as future risk scenarios were evaluated. Conservative consumption rates and exposure scenarios for each indicator chemical were used for the six exposure routes.

The endangerment assessment indicates that their is no current risk that is attributable to the Site. The endangerment assessment identified arsenic as the only chemical in the ground water that may causes its risk levels to exceed Federal guidelines in the future groundwater use scenarios. That is if potable water wells were drilled on Site, in the Kirkwood aquifer there may be an unacceptable risk to users of that water. Furthermore, EPA believes that the use of the Kirkwood aquifer at the Site is a very remote possibility due to the limited aquifer thickness and low hydraulic conductivity. Therefore, EPA believes that the portion of the Kirkwood aquifer underlying the Site is not an adequate source of water for a private well. This finding is also based on the conservative assumption that the arsenic concentrations found in the unfiltered ground water samples are representative of ground water quality in the Kirkwood aquifer. EPA believes that the levels of arsenic in samples from ground water monitoring wells are not representative of actual concentrations in the ground water because arsenic was detected only in unfiltered samples (arsenic tends to adsorb onto particles which immobilize the element)

EPA believes that the actual risk from arsenic is acceptable for the following reasons: 1) arsenic was not detected in any off-site potable wells, 2) concentration levels in all filtered monitoring well samples are below Safe Drinking Water Act standards and are comparable to background levels, 3) and by including the arsenic concentration levels from unfiltered samples in future use scenarios in the risk assessment, a conservative estimation of future potential risk was obtained (5.7×10^{-4}) which resulted in a risk range which only marginally exceeded EPA's target risk range (ie., 10^{-4} to 10^{-7}). EPA believes that this is a very remote possibility due to the limited aquifer thickness and low hydraulic conductivity on the Site.

The results indicate that the only media posing potential unacceptable risk to human health is consumption of ground water from unfiltered monitoring wells in future use scenarios. Given the current Site conditions, the cumulative lifetime cancer risk for this Site is within Federal guidelines for acceptable exposures.

Thus the current threat to human health and the environment from this Site is minimal.

STATUTORY AUTHORITY FINDINGS

In December of 1982, the Site was proposed for the Superfund National Priorities List (NPL). The Site was officially added to the NPL in September of 1983.

Although there is no significant contamination which is attributable to the Site, there are environmental controls which need to be implemented and maintained. Such actions are not within the jurisdictional authority of CERCLA.

Upon the completion of the remedial investigation, it appears this Site should instead be handled under the authorities designated to close and remediate municipal landfills. Therefore, the remedial alternative selection process to describe and select a remedial action as mandated by CERCLA, was not appropriate for this site. Subtitle D of the Resources Recovery and Conservation Act of 1976 as amended by the Solid Waste Disposal Act of 1980, is the Federal statute concerning municipal landfills, and its regulations address post-landfill closure monitoring requirements. NJDEP is authorized to regulate municipal landfill closures and post-closure monitoring in New Jersey. For this reason EPA is referring this Site to the NJDEP for further action. Current State statutes also regulate post-landfill closure ground water and surface water monitoring requirements for municipal landfills

COMMUNITY ROLE IN SELECTION PROCESS

EPA and NJDEP rely on public input to assure that the action selected for each Superfund site considers the needs of the local community, in addition to being an effective solution to the problem. To this end, this Proposed Plan is being distributed to the public for comment. The public is therefore encouraged to review and comment on all aspects of the plan.

Written and verbal comments on the plan, the remedial investigation documents and the endangerment assessment will be welcomed through July 28, 1990.

The comments and EPA's responses to those comments will be documented in a Responsiveness Summary. The Responsiveness Summary will be appended to the subsequent Record of Decision (ROD) which formally documents the decision for the Site.

All written comments should be addressed to:

Lance R. Richman, P.G.
Regional Project Manager
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
26 Federal Plaza, Room 747
New York, New York 10278

A public meeting will be held in the upstairs room of the West Park Recreation Center on July 12, 1990 at 7:00 p.m., to present the details of the remedial investigation, endangerment assessment and the proposed plan. The West Park Recreation Center is part of the Ocean Community Pool and Tennis Complex, located on West Park Avenue between Highway 35 and Whale Pond Road in Oakhurst, New Jersey.

Citation 57 FR 4824-01 | Rank(R) R 1 OF 7 | Database FR | Mode P

PROPOSED RULES

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 300

(FRL-4102-5)

National Priorities List for Uncontrolled Hazardous Waste Sites, Proposed Rule No. 12

Friday, February 7, 1992

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA"), as amended, requires that the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP") include a list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States. The National Priorities List ("NPL") constitutes this list.

The Environmental Protection Agency ("EPA") is proposing to add new sites to the NPL. This 12th major proposed rule includes 30 sites, of which 6 are Federal facility sites. The identification of a site for the NPL is intended primarily to guide EPA in determining which sites warrant further investigation to access the nature and extent of public health and environmental risks associated with the site and to determine what CERCLA-financed remedial action(s), if any, may be appropriate. This proposed rule brings the number of proposed NPL sites to 52, of which 9 are Federal facility sites; 1,183 sites are on the NPL at this time, of which 116 are Federal facility sites. Proposed and final NPL sites total 1,235.

DATES: Comments on the Austin Avenue Radiation site, being proposed in this rule based on the health advisory criteria, must be submitted on or before March 9, 1992. Comments on all other sites must be submitted on or before April 7, 1992.

ADDRESSES: Mail original and three copies of comments (no facsimiles) to Larry Reed, Director, Hazardous Site Evaluation Division (Attn: NPL Staff), Office of Emergency and Remedial Response (OS-230), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460. For Docket addresses and further details on their contents, see section I of the "Supplementary Information" portion of this preamble.

FOR FURTHER INFORMATION CONTACT: Martha Otto, Hazardous Site Evaluation

Division, Office of Emergency and Remedial Response (OS-230), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, or the Superfund Hotline, Phone (800) 424-9346 or (703) 920-9810 in the Washington, DC metropolitan area).

SUPPLEMENTARY INFORMATION:

I. Introduction

Background

In 1980, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601-9675 ("CERCLA" or "the Act") in response to the dangers of uncontrolled hazardous waste sites. CERCLA was amended on October 17, 1986, by the Superfund Amendments and Reauthorization Act ("SARA"), Public Law No. 99-499, stat. 1613 et seq. To implement CERCLA, the Environmental Protection Agency ("EPA" or "the Agency") promulgated the revised National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), 40 CFR part 300, on July 16, 1982 (47 FR 31180), pursuant to CERCLA section 105 and Executive Order 12316 (46 FR 42237, August 20, 1981). The NCP sets forth the guidelines and procedures needed to respond under CERCLA to releases and threatened releases of hazardous substances, pollutants, or contaminants. EPA has revised the NCP on several occasions, most recently on March 8, 1990 (55 FR 8666).

Section 105(a)(8)(A) of CERCLA requires that the NCP include "criteria for determining priorities among releases or threatened releases throughout the United States for the purpose of taking remedial action." As defined in CERCLA section 101(24), remedial action tends to be long-term in nature and involves response actions that are consistent with a permanent remedy for a release.

Mechanisms for determining priorities for possible remedial actions financed by the Trust Fund established under CERCLA (commonly referred to as the "Superfund") are included in the NCP at 40 CFR 300.425(c) (55 FR 8845, March 8, 1990). Under 40 CFR 300.425(c)(1), a site may be included on the NPL if it scores sufficiently high on the Hazard Ranking System ("HRS"), which EPA promulgated as appendix A of 40 CFR part 300. On December 14, 1990 **(55 FR 51532),** EPA promulgated revisions to the HRS partly in response to CERCLA section 105(c), added by SARA. The revised HRS evaluates four pathways: Ground water, surface water, soil exposure, and air. The HRS serves as a screening device to evaluate the relative potential of uncontrolled hazardous substances to pose a threat to human health or the environment. Those sites that score 28.50 or greater on the HRS are eligible for the NPL.

Under a second mechanism for adding sites to the NPL, each State may designate a single site as its top priority, regardless of the HRS score. This mechanism, provided by the NCP at 40 CFR 300.425(c)(2), requires that, to the extent practicable, the NPL include within the 100 highest priorities, one

facility designated by each State representing the greatest danger to public health, welfare, or the environment among known facilities in the State.

The third mechanism for listing, included in the NCP at 40 CFR 300.425(c)(3), allows certain sites to be listed whether or not they score above 28.50, if all of the following conditions are met:

- The Agency for Toxic Substances and Disease Registry (ATSDR) of the U.S. Public Health Service has issued a health advisory that recommends dissociation of individuals from the release.
- EPA determines that the release poses a significant threat to public health.
- EPA anticipates that it will be more cost-effective to use its remedial authority (available only at NPL sites) than to use its removal authority to respond to the release.

Based on these criteria, and pursuant to section 105(a)(8)(B) of CERCLA, as amended by SARA, EPA prepares a list of national priorities among the known or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States. That list, which is appendix B of 40 CFR part 300, is the National Priorities List ("NPL"). The discussion below may refer to the "releases or threatened releases" that are included on the NPL interchangeably as "releases," "facilities," or "sites." [FN1] CERCLA section 105(a)(8)(B) also requires that the NPL be revised at least annually. A site may undergo CERCLA-financed remedial action only after it is placed on the NPL, as provided in the NCP at 40 CFR 300.425(b)(1).

FN1 CERCLA section 105(a)(8)(B) defines the NPL as a list of "releases" and as a list of the highest priority "facilities." For ease of reference, EPA uses the term "site" to refer to all "releases" and "facilities" on the NPL.

EPA promulgated an original NPL of 406 sites on September 8, 1983 (48 FR 40658). The NPL has been expanded since then, most recently on September 25, 1991 (56 FR 48438).

The NPL includes two sections, one of sites evaluated and cleaned up by EPA (the "General Superfund section"), and one of sites being addressed by other Federal agencies (the "Federal facilities section"). Under Executive Order 12580 and CERCLA section 120, each Federal agency is responsible for carrying out most response actions at facilities under its own jurisdiction, custody, or control, although EPA is responsible for preparing an HRS score; EPA is not the lead agency at these sites, and its role at such sites is accordingly less extensive than at other sites. The Federal facilities section includes those facilities at which EPA is not the lead agency. The general superfund section includes 1,067 sites and the Federal facilities section includes 116 sites, for a total of 1,183 sites on the NPL.

EPA may delete sites from the NPL where no further response is appropriate, as explained in the NCP at 40 CFR 300.425(e) (55 FR 8845, March 8, 1990). To date, the Agency has deleted 40 sites from the general superfund section of the NPL, most recently 2 sites on January 6, 1992 (57 FR 355):

John's Sludge Pond, Wichita, Kansas
Beachwood/Berkley Wells, Berkley Township, New Jersey

All 40 deleted sites are listed below.

Final Sites Deleted From NPL Because No Further Response Needed
(January 1992)

St	Site name	Location
AR	Cecil Lindsey	Newport.
AS	Taputimu Farm [FNa]	Island of Tutila.
AZ	Mountain View Mobile Home Estates (once listed as Globe) [FNa]	Globe.
CA	Jibboom Junkyard	Sacramento.
CM	PCB Warehouse [FNa]	Saipan.
DE	New Castle Steel	New Castle County.
FL	Parramore Surplus	Mount Pleasant.
FL	Tri-City Oil Conservationist, Inc	Tampa.
FL	Varsol Spill (once listed as part of Biscayne Aquifer)	Miami.
GA	Luminous Processes, Inc	Athens.
IL	Petersen Sand & Gravel	Libertyville.
IN	International Minerals & Chemical Corp. (Terre Haute East Plant)	Terre Haute.
IN	Poer Farm	Hancock County.
IN	Wedzeb Enterprises	Lebanon.
KS	Johns' Sludge Pond	Wichita.
MD	Chemical Metals Industries, Inc	Baltimore.
MD	Middletown Road Dump	Annapolis.
MI	Gratiot County Golf Course	St. Louis.
MI	Whitehall Municipal Wells	Whitehall.
MN	Morris Arsenic Dump	Morris.
MN	Union Scrap Iron & Metal Co	Minneapolis.
MS	Walcotte Chemical Co. Warehouses	Greenville.
NC	PCB Spills [FNa]	243 Miles of Roads.
NJ	Beachwood/Berkeley Wells	Ocean County.
NJ	Cooper Road	Voorhees Township.
NJ	Friedman Property (once listed as Upper Freehold Site)	Upper Freehold.
NJ	Krysowaty Farm	Hillsborough.
NJ	M&T Delisa Landfill	Asbury Park.
OH	Chemical & Minerals Reclamation	Cleveland.
PA	Enterprise Avenue	Philadelphia.
PA	Lansdowne Radiation	Lansdowne.
PA	Lehigh Electric & Engineering Co	Old Forge Borough.
PA	Presque Isle	Erie.
PA	Reeser's Landfill	Upper Macungie.
PA	Voortman Farm	Upper Saucon.
PA	Wade (ABM) (once listed as ABM-Wade)	Chester.
TT	PCB Wastes [FNa]	Pacific Trust Terr.
TX	Harris (Farley Street)	Houston.
VA	Matthews Electroplating [FNa]	Roanoke County.
WA	Toftdahl Drums	Brush Prairie.

Number of Sites Deleted: 40.
a State top-priority.

In addition, 25 sites in the general superfund section are in the "Construction Completion" category, including 13 sites added to the category on January 16, 1992 (57 FR 1872). When EPA activated the category on February 11, 1991 (56 FR 5634), it stated that the category would consist of sites awaiting deletion, sites awaiting the first 5-year review after the remedial action was completed, and sites undergoing long-term remedial action. EPA has decided to eliminate the 5-year review subcategory. On the basis of subsequent experience and analysis, EPA has determined that tying these two independent processes (5-year review and deletion) is unnecessary and potentially confusing. (December 24, 1991 (56 FR 66601)).

Thus, a total of 65 sites, all in the general superfund section, have been deleted or placed in the construction completion category.

Pursuant to the NCP at 40 CFR 300.425(c), this document proposes to add 30 sites to the NPL. Final and proposed sites now total 1,235.

Public Comment Period

The documents that form the basis for EPA's evaluation and scoring of sites in this rule are contained in dockets located both at EPA Headquarters and in the Regional offices. The dockets are available for viewing, by appointment only, after the appearance of this document. The hours of operation for the Headquarters docket are from 9 a.m. to 4 p.m., Monday through Friday exluding Federal holidays. Please contact individual Regional Dockets for hours.

Docket Coordinator, Headquarters, U.S. EPA CERCLA Docket Office, OS-245, Waterside Mall, 401 M Street, SW., Washington, DC 20460, 202/260-3046.

Evo Cunha, Region 1, U.S. EPA Waste Management Records Center, HES-CAN 6, J.F. Kennedy Federal Building, Boston, MA 02203-2211, 617/573-5729.

Ben Conetta, Region 2, 26 Federal Plaza, 7th Floor, room 740, New York, NY 10278, 212/264-6696.

Diane McCreary, Region 3, U.S. EPA Library, 3rd Floor, 841 Chestnut Building, 9th & Chestnut Streets, Philadelphia, PA 19107, 215/597-7904.

Beverly Fulwood, Region 4, U.S. EPA Library, room G-6, 345 Courtland Street, NE., Atlanta, GA 30365, 404/347-4216.

Cathy Freeman, Region 5, U.S. EPA, Records Center, Waste Management Division 7-J, Metcalfe Federal Building, 77 West Jackson Blvd., Chicago, IL 60604, 312/886-6214.

Bart Canellas, Region 6, U.S. EPA, 1445 Ross Avenue, Mail Code 6H-MA, Dallas, TX 75202-2733, 214/665-6740.

Steven Wyman, Region 7, U.S. EPA Library, 726 Minnesota Avenue, Kansas City, KS 66101, 913/551-7241.

Greg Oberley, Region 8, U.S. EPA, 999 18th Street, suite 500, Denver, CO 80202-2466, 303/294-7598.

Lisa Nelson, Region 9, U.S. EPA, 75 Hawthorne Street, San Francisco, CA 94105, 415/744-2347.

David Bennett, Region 10, U.S. EPA, 11th Floor, 1200 6th Avenue, Mail Stop HW-113, Seattle, WA 98101, 206/442-2103.

The Headquarters docket for this rule contains HRS score sheets for each proposed site; a Documentation Record for each site describing the information used to compute the score; pertinent information for any site affected by

statutory requirements or EPA listing policies; and a list of documents referenced in the Documentation Record. Each Regional docket for this rule contains all of the above information for those sites that are in that Region, and, in addition, the technical reference documents relied upon and cited by EPA in calculating or evaluating the HRS scores for sites in that Region. Documents may be viewed, by appointment only, in the Headquarters or appropriate Regional Docket. Requests for copies may be directed to the Headquarters or appropriate Regional Docket. An informal written request, rather than a formal request under the Freedom of Information Act, should be the ordinary procedure for obtaining copies of any of these documents.

EPA considers all comments received during the comment period. During the comment period, comments are placed in the Headquarters docket and are available to the public on an "as received" basis. A complete set of comments will be available for viewing in the Regional docket approximately one week after the formal comment period closes. Comments received after the comment period closes will be available in the Headquarters docket and in the Regional docket on an "as received" basis.

Comments that include complex or voluminous reports, or materials prepared for purposes other than HRS scoring, should point out the specific information that EPA should consider and how it affects individual HRS factor values. See Northside Sanitary Landfill v. Thomas, 849 F. 2d 1516 (D.C. Cir. 1988). After considering the relevant comments received during the comment period, EPA will add sites to the NPL if they meet requirements set out in the NCP and any applicable listing policies.

In past rules, EPA has attempted to respond to late comments, or when that was not practicable, to read all late comments and address those that brought to the Agency's attention a fundamental error in the scoring of a site. (See, most recently, 56 FR 35840, July 29, 1991). Although EPA intends to pursue the same policy with sites in this rule, EPA can guarantee that it will consider only those comments postmarked by the close of the formal comment period. EPA cannot delay a final listing decision solely to accommodate consideration of late comments.

Note that the comment period for the Austin Avenue Radiation site, which is being proposed based on the health advisory criteria and not the HRS score, is 30 days. This is based on the acute threat posed and the fact that documentation using the health advisory criteria is not nearly as complex to review as that using the HRS (all health advisory sites have 30-day comment periods). All other sites in this rule have a 60-day comment period.

II. Purpose and Implementation of the NPL

Purpose

The legislative history of CERCLA (Report of the Committee on Environment and Public Works, Senate Report No. 96-848, 96th Cong., 2d Sess. 60 (1980)) states the primary purpose of the NPL:

The priority lists serve primarily informational purposes, identifying for the States and the public those facilities and sites or other releases which appear to warrant remedial actions. Inclusion of a facility or site on the list does not in itself reflect a judgment of the activities of its owner or operator, it

does not require those persons to undertake any action, nor does it assign liability to any person. Subsequent government action in the form of remedial actions or enforcement actions will be necessary in order to do so, and these actions will be attended by all appropriate procedural safeguards.

The purpose of the NPL, therefore, is primarily to serve as an informational and management tool. The identification of a site for the NPL is intended primarily to guide EPA in determining which sites warrant further investigation to assess the nature and extent of the public health and environmental risks associated with the site and to determine what CERCLA-financed remedial action(s), if any, may be appropriate. The NPL also serves to notify the public of sites that EPA believes warrant further investigation. Finally, listing a site may, to the extent potentially responsible parties are identifiable at the time of listing, serve as notice to such parties that the Agency may initiate CERCLA-financed remedial action.

Implementation

The NCP at 40 CFR 300.425(b)(1) (55 FR 8845, March 8, 1990) limits expenditure of the Trust Fund for remedial actions to sites on the final NPL. However, EPA may take enforcement actions under CERCLA or other applicable statutes against responsible parties regardless of whether the site is on the NPL, although, as a practical matter, the focus of EPA's CERCLA enforcement actions has been and will continue to be on NPL sites. Similarly, in the case of CERCLA removal actions, EPA has the authority to act at any site, whether listed or not, that meets the criteria of the NCP at 40 CFR 300.425(b)(1) (55 FR 8845, March 8, 1990). As of the end of December 1991, EPA had conducted 2,133 removal actions, 523 of them at NPL sites. Information on removals is available from the Superfund Hotline.

EPA's policy is to pursue cleanup of NPL sites using all the appropriate response and/or enforcement actions available to the Agency, including authorities other than CERCLA. The Agency will decide on a site-by-site basis whether to take enforcement or other action under CERCLA or other authorities, proceed directly with CERCLA-financed response actions and seek to recover response costs after cleanup, or do both. To the extent feasible, once sites are on the NPL, EPA will determine high-priority candidates for CERCLA-financed response action and/or enforcement action through both State and Federal initiatives. EPA will take into account which approach is more likely to accomplish cleanup of the site most expeditiously while using CERCLA's limited resources as efficiently as possible.

The ranking of sites by HRS scores does not determine the sequence in which EPA funds remedial response actions, since the information collected to develop HRS scores is not sufficient in itself to determine either the extent of contamination or the appropriate response for a particular site. Moreover, the sites with the highest scores do not necessarily come to the Agency's attention first, so that addressing sites strictly on the basis of ranking would in some cases require stopping work at sites where it was already underway. Thus, EPA relies on further, more detailed studies in the remedial investigation/feasibility study (RI/FS) that typically follows listing.

The RI/FS determines the nature and extent of the threat presented by the contamination (40 CFR 300.430(a)(2) (55 FR 8846, March 8, 1990). It also takes

into account the amount of contaminants in the environment, the risk to affected populations and environment, the cost to correct problems at the site, and the response actions that have been taken by potentially responsible parties or others. Decisions on the type and extent of action to be taken at these sites are made in accordance with subpart E of the NCP (55 FR 8839, March 8, 1990). After conducting these additional studies, EPA may conclude that it is not desirable to initiate a CERCLA remedial action at some sites on the NPL because of more pressing needs at other sites, or because a private party cleanup is already underway pursuant to an enforcement action. Given the limited resources available in the Trust Fund, the Agency must carefully balance the relative needs for response at the numerous sites it has studied. It is also possible that EPA will conclude after further analysis that the site does not warrant remedial action.

RI/FS at Proposed Sites

An RI/FS may be performed at proposed sites (or even non-NPL sites) pursuant to the Agency's removal authority under CERCLA, as outlined in the NCP at 40 CFR 300.425(b)(1). Although an RI/FS generally is conducted at a site after it has been placed on the NPL, in a number of circumstances the Agency elects to conduct an RI/FS at a proposed NPL site in preparation for a possible CERCLA-financed remedial action, such as when the Agency believes that a delay may create unnecessary risks to public health or the environment. In addition, the Agency may conduct an RI/FS to assist in determining whether to conduct a removal or enforcement action at a site.

Facility (Site) Boundaries

The purpose of the NPL is merely to identify releases or threatened releases of hazardous substances that are priorities for further evaluation. The Agency believes that it would be neither feasible nor consistent with this limited purpose for the NPL to attempt to describe releases in precise geographical terms. The term "facility" is broadly defined in CERCLA to include any area where a hazardous substance has "come to be located" (CERCLA section 101(9)), and the listing process is not intended to define or reflect boundaries of such facilities or releases. Site names are provided for general identification purposes only. Knowledge regarding the extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

Because the NPL does not assign liability or define the geographic extent of a release, a listing need not be amended if further research into the extent of the contamination reveals new information as to its extent. This is further explained in preambles to past NPL rules, most recently February 11, 1991 (56 FR 5598).

III. Contents of This Proposed Rule

Table 1 identifies the 24 NPL sites in the general superfund section and table 2 identifies the 6 NPL sites in the Federal facilities section being proposed in this rule. Both tables follow this preamble. All but one site are proposed

based on HRS scores of 28.50 or above. One site, Austin Avenue Radiation Site, is being proposed based on the ATSDR health advisory criteria. Each proposed site is placed by score in a group corresponding to groups of 50 sites presented within the NPL. For example, a site in group 4 of this proposal has a score that falls within the range of scores covered by the fourth group of 50 sites on the NPL.

Since promulgation of the original NPL (48 FR 40660, September 8, 1983), EPA has arranged the NPL by rank based on HRS scores and presented sites on the NPL in groups of 50 to emphasize that minor differences in scores do not necessarily represent significantly different levels of risk.

EPA has proposed an alternative, and what it believes to be more useful, format for presenting NPL sites in both proposed and final rules (56 FR 35843, July 29, 1991). Under this approach, proposed and final rules would present sites in alphabetical order by State and by site name within the State, as well as identify sites in each rule by rank. Once a year the entire NPL, appendix B, would be published alphabetically by State. EPA has requested comment on that approach. Until all comments are received and considered, no final decision on the format will be made. The following table presents the 24 general superfund section sites and 6 Federal facility section sites in this rule in the proposed format.

National Priorities List, General Superfund Section Proposed Rule #12
(By state)

State	Site name	City/county
AR	Popile, Inc	El Dorado.
AR	West Memphis Landfill	West Memphis.
CA	Cooper Drum Co	South Gate.
CA	GBF, Inc. Dump	Antioch.
CA	McCormick & Baxter Creosoting Co	Stockton.
CO	Smeltertown Site	Salida.
FL	Helena Chemical Co. (Tampa Plant)	Tampa.
FL	Stauffer Chemical Co. (Tampa Plant)	Tampa.
FL	Stauffer Chemical Co. (Tarpon Springs Plant)	Tarpon Springs.
IN	U.S. Smelter and Lead Refinery, Inc	East Chicago.
KS	57th and North Broadway Streets Site	Wichita Heights.
LA	American Creosote Works, Inc. (Winnfield Plant)	Winnfield.
MA	Blackburn & Union Privileges	Walpole.
MO	Big River Mine Tailings/St. Joe Minerals Corp	Desloge.
NC	General Electric Co./Shepherd Farm	East Flat Rock.
OR	Northwest Pipe & Casing Co	Clackamas.
PA	Austin Avenue Radiation Site	Lansdowne.
PA	Crater Resources, Inc./Keystone Coke Co./Alan Wood Steel Co	Upper Merion Township.
PA	Foote Mineral Co	East Whiteland Township.
PA	Metropolitan Mirror and Glass Co., Inc	Frackville.
SC	Koppers Co., Inc. (Charleston Plant)	Charleston.

UT	Richardson Flats Tailings	Summit County.
VI	Tutu Wellfield	Tutu.
WI	Refuse Hideaway Landfill	Middleton.

Number of Sites Proposed for Listing: 24.

National Priorities List, Federal Facilities Section Proposed Rule #12
(By state)

State	Site name	City/county
CA	Concord Naval Weapons Station	Concord.
CA	Jet Propulsion Laboratory (NASA)	Pasadena.
GU	Andersen Air Force Base	Yigo.
TN	Memphis Defense Depot	Memphis.
VA	Naval Surface Warfare Center--Dahlgren ..	Dahlgren.
VA	Naval Weapons Station--Yorktown	Yorktown.

Number of Sites Proposed for Listing: 6.

Statutory Requirements

CERCLA section 105(a)(8)(B) directs EPA to list priority sites "among" the known releases or threatened releases of hazardous substances, pollutants, or contaminants, and section 105(a)(8)(A) directs EPA to consider certain enumerated and "other appropriate" factors in doing so. Thus, as a matter of policy, EPA has the discretion not to use CERCLA to respond to certain types of releases. Where other authorities exist, placing sites on the NPL for possible remedial action under CERCLA may not be appropriate. Therefore, EPA has chosen not to place certain types of sites on the NPL even though CERCLA does not exclude such action. If, however, the Agency later determines that sites not listed as a matter of policy are not being properly responded to, the Agency may place them on the NPL.

The listing policies and statutory requirements of relevance to this proposed rule cover sites subject to the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 6901-6991i) and Federal facility sites. These policies and requirements are explained below and have been explained in greater detail in previous rulemakings (56 FR 5598, February 11, 1991).

Releases From Resource Conservation and Recovery Act (RCRA) Sites

EPA's policy is that sites in the general superfund section subject to RCRA Subtitle C corrective action authorities will not, in general, be placed on the NPL. However, EPA will list certain categories of RCRA sites subject to subtitle C corrective action authorities, as well as other sites subject to those authorities, if the Agency concludes that doing so best furthers the aims of the NPL/RCRA policy and the CERCLA program. EPA has explained these policies in detail in past Federal Register discussions (51 FR 21054, June 10,

1986; 53 FR 23978, June 24, 1988; 54 FR 41000, October 4, 1989; 56 FR 5602, February 11, 1991).

Consistent with EPA's NPL/RCRA policy, EPA is proposing to add three sites to the general superfund section of the NPL that are subject to RCRA subtitle C corrective action authorities. These are McCormick and Baxter Creosoting Co. in Stockton, California, U.S. Smelter and Lead Refinery, Inc. in East Chicago, Indiana, and General Electric Co./Shepherd Farm in East Flat Rock, North Carolina. Material has been placed in the public docket for the U.S. Smelter and Lead Refinery, Inc. site and the McCormick and Baxter Creosoting Co. site confirming that the owners are in bankruptcy and unable to pay for cleanup, and for the General Electric Co./Shepherd Farm site confirming its converter status.

Releases From Federal Facility Sites

On March 13, 1989 (54 FR 10520), the Agency announced a policy for placing Federal facility sites on the NPL if they meet the eligibility criteria (e.g., an HRS score of 28.50 or greater), even if the Federal facility also is subject to the corrective action authorities of RCRA subtitle C. In that way, those sites could be cleaned up under CERCLA, if appropriate.

In this rule, the Agency is proposing to add six sites to the Federal facilities section of the NPL.

Austin Avenue Radiation Site

The Austin Avenue Radiation site, Lansdowne, Pennsylvania, consists of a duplex apartment, a warehouse attached to the apartment, other residences where radioactive wastes have been deposited, and an adjacent railroad right-of-way. The warehouse is the former location of the W.L. Cummings Radium Processing Company, which operated a radium refining process from 1915 to 1925. The apartment and nearby areas are believed to have been contaminated with radium tailings and subsequent radioactive decay from the operation.

The ATSDR Public Health Advisory issued on September 6, 1991 recommends the immediate dissociation of residents from the site. Although there are no longer any residents in either the apartment or warehouse, the site has no security and ATSDR is concerned about the potential for fires, intrusion, or unauthorized events at the site. In case of a fire, the contaminants would be indiscriminantly distributed throughout the neighborhood, which would result in widespread contamination. In addition, nearby homes are contaminated with these wastes.

The health advisory and other supporting documentation have been placed in the public docket.

IV. Regulatory Impact Analysis

The costs of cleanup actions that may be taken at sites are not directly attributable to placement on the NPL, as explained below. Therefore, the Agency has determined that this rulemaking is not a "major" regulation under Executive Order 12291. EPA has conducted a preliminary analysis of the economic implications of today's proposal to add new sites to the NPL. EPA believes that

the kinds of economic effects associated with this proposed revision are generally similar to those identified in the regulatory impact analysis (RIA) prepared in 1982 for revisions to the NCP pursuant to section 105 of CERCLA (47 FR 31180, July 16, 1982) and the economic analysis prepared when amendments to the NCP were proposed (50 FR 5882, February 12, 1985). The Agency believes that the anticipated economic effects related to proposing to add these sites to the NPL can be characterized in terms of the conclusions of the earlier RIA and the most recent economic analysis. This rule was submitted to the Office of Management and Budget for review as required by Executive Order 12291.

Costs

This proposed rulemaking is not a "major" regulation because it does not establish that EPA necessarily will undertake remedial action, nor does it require any action by a private party or determine its liability for site response costs. Costs that arise out of responses at sites in the EPA section of the NPL result from site-by-site decisions about what actions to take, not directly from the act of listing itself. Nonetheless, it is useful to consider the costs associated with responding to all sites in this rule. The proposed listing of a site on the NPL may be followed by a search for potentially responsible parties and a Remedial Investigation/Feasibility Study (RI/FS) to determine if remedial actions will be undertaken at a site. The selection of a remedial alternative, and design and construction of that alternative, follow completion of the RI/FS, and operation and maintenance (O&M) activities may continue after construction has been completed.

EPA initially bears costs associated with responsible party searches. Responsible parties may enter into consent orders or agreements to conduct or pay the costs of the RI/FS, remedial design and construction, and O&M, or EPA and the States may share costs up front and subsequently bring an action for cost recovery.

The State's share of site cleanup costs for Fund-financed actions is governed by CERCLA section 104. For privately-owned sites, as well as at publicly-owned but not publicly-operated sites, EPA will pay for 100% of the costs of the RI/FS and remedial planning, and 90% of the costs of the remedial action, leaving 10% to the State. For publicly-operated sites, the State's share is at least 50% of all response costs at the site, including the RI/FS and remedial design and construction of the remedial action selected. After the remedy is built, costs fall into two categories:

- For restoration of ground water and surface water, EPA will share in start-up costs according to the ownership criteria in the previous paragraph for 10 years or until a sufficient level of protectiveness is achieved before the end of 10 years. 40 CFR 300.435(f)(3).
- For other cleanups, EPA will share the cost of a remedy until it is operational and functional, which generally occurs after one year. 40 CFR 300.435(f)(2), 300.510(c)(2). After that, the State assumes all O&M costs. 40 CFR 300.510(c)(1).

In previous NPL rulemakings, the Agency estimated the costs associated with these activities (RI/FS, remedial design, remedial action, and O&M) on an average-per-site and total cost basis. EPA will continue with this approach, using the most recent (1988) cost estimates available; these estimates are

presented below. However, costs for individual sites vary widely, depending on the amount, type, and extent of contamination. Additionally, EPA is unable to predict what portions of the total costs responsible parties will bear, since the distribution of costs depends on the extent of voluntary and negotiated response and the success of any cost-recovery actions.

Cost category	Average total cost per site [FN1]
RI/FS	$1,300,00
Remedial Design	1,500,000
Remedial Action	[FN2] 25,000,000
Net present value of O&M [FN3]	[FN2] 3,770,000

1 1988 U.S. Dollars
2 Includes State cost-share
3 Assumes cost of O&M over 30 years, $400,000 for the first year and 10% discount rate.
Source: Office of Program Management, Office of Emergency and Remedial Response, U.S. EPA, Washington, DC.

Costs to States associated with today's proposed rule arise from the required State cost-share of: (1) 10% of remedial actions and 10% of first-year O&M costs at privately-owned sites and sites that are publicly-owned but not publicly-operated; and (2) at least 50% of the remedial planning (RI/FS and remedial design), remedial action, and first-year O&M costs at publicly-operated sites. States will assume the cost for O&M after EPA's participation ends. Using the assumptions developed in the 1982 RIA for the NCP, EPA has assumed that 90% of the non-Federal sites proposed for the NPL in this rule will be privately-owned and 10% will be State- or locally-operated. Therefore, using the budget projections presented above, the cost to States of undertaking Federal remedial planning and actions at all non-Federal sites in today's proposed rule, but excluding O&M costs, would be approximately $97 million. State O&M costs cannot be accurately determined because EPA, as noted above, will share O&M costs for up to 10 years for restoration of ground water and surface water, and it is not known how many sites will require this treatment and for how long. However, based on past experience, EPA believes a reasonable estimate is that it will share start-up costs for up to 10 years at 25% of sites. Using this estimate, State O&M costs would be approximately $80 million. As with the EPA share of costs, portions of the State share will be borne by responsible parties.

Placing a hazardous waste site on the NPL does not itself cause firms responsible for the site to bear costs. Nonetheless, a listing may induce firms to clean up the sites voluntarily, or it may act as a potential trigger for subsequent enforcement or cost-recovery actions. Such actions may impose costs on firms, but the decisions to take such actions are discretionary and made on a case-by-case basis. Consequently, these effects cannot be precisely estimated. EPA does not believe that every site will be cleaned up by a responsible party. EPA cannot project at this time which firms or industry sectors will bear specific portions of the response costs, but the Agency

considers: the volume and nature of the waste at the sites; the strength of the evidence linking the wastes at the site to the parties; the parties' ability to pay; and other factors when deciding whether and how to proceed against the parties.

Economy-wide effects of this proposed amendment to the NCP are aggregations of effects on firms and State and local governments. Although effects could be felt by some individual firms and States, the total impact of this proposal on output, prices, and employment is expected to be negligible at the national level, as was the case in the 1982 RIA.

Benefits

The real benefits associated with today's proposal to place additional sites on the NPL are increased health and environmental protection as a result of increased public awareness of potential hazards. In addition to the potential for more Federally-financed remedial actions, expansion of the NPL could accelerate privately-financed, voluntary cleanup efforts. Proposing sites as national priority targets also may give States increased support for funding responses at particular sites.

As a result of the additional CERCLA remedies, there will be lower human exposure to high-risk chemicals, and higher-quality surface water, ground water, soil, and air. These benefits are expected to be significant, although difficult to estimate before the RI/FS is completed at these sites.

VII. Regulatory Flexibility Act Analysis

The Regulatory Flexibility Act of 1980 requires EPA to review the impacts of this action on small entities, or certify that the action will not have a significant impact on a substantial number of small entities. By small entities, the Act refers to small businesses, small government jurisdictions, and nonprofit organizations.

While this rule proposes revisions to the NCP, they are not typical regulatory changes since the revisions do not automatically impose costs. As stated above, adding sites to the NPL does not in itself require any action by any private party, nor does it determine the liability of any party for the cost of cleanup at the site. Further, no identifiable groups are affected as a whole. As a consequence, impacts on any group are hard to predict. A site's proposed inclusion on the NPL could increase the likelihood of adverse impacts on responsible parties (in the form of cleanup costs), but at this time EPA cannot identify the potentially affected businesses nor estimate the number of small businesses that might also be affected.

The Agency does expect that CERCLA actions could significantly affect certain industries, and firms within industries, that have caused a proportionately high percentage of waste site problems. However, EPA does not expect the listing of these sites to have a significant economic impact on a substantial number of small businesses.

In any case, economic impacts would occur only through enforcement and cost-recovery actions, which EPA takes at its discretion on a site-by-site basis. EPA considers many factors when determining enforcement actions, including not only the firm's contribution to the problem, but also its ability to pay.

The impacts (from cost recovery) on small governments and nonprofit organizations would be determined on a similar case-by-case basis.

List of Subjects in 40 CFR Part 300

Air pollution control, Chemicals, Hazardous materials, Intergovernmental relations, Natural resources, Oil pollution, Reporting and recordkeeping requirements, Superfund, Waste treatment and disposal, Water pollution control, Water supply.

Table 1.--National Priorities List, General Superfund Section Proposed Rule #12
(By group)

NPL Gr [FN1]	State	Site name	City/county
1	CA	McCormick & Baxter Creosoting Co	Stockton.
1	CO	Smeltertown Site	Salida.
1	FL	Stauffer Chemical Co. (Tampa Plant)	Tampa.
1	FL	Stauffer Chemical Co. (Tarpon Springs Plant)	Tarpon Springs.
1	IN	U.S. Smelter and Lead Refinery, Inc	East Chicago.
1	MO	Big River Mine Tailings/St. Joe Minerals Corp	Desloge.
1	NC	General Electric Co./Shepherd Farm	East Flat Rock.
4	AR	West Memphis Landfill	West Memphis.
4	CA	GBF, Inc. Dump	Antioch.
4	OR	Northwest Pipe & Casing Co	Clackamas.
4	UT	Richardson Flats Tailings	Summit County.
5	AR	Popile, Inc	El Dorado.
5	CA	Cooper Drum Co	South Gate.
5	KS	57th and North Broadway Streets Site	Wichita Heights.
5	LA	American Creosote Works, Inc. (Winnfield Plant)	Winnfield.
5	MA	Blackburn and Union Privileges	Walpole.
5	PA	Crater Resources, Inc./Keystone Coke Co./Alan Wood Steel Co	Upper Merion Twp.
5	PA	Foote Mineral Co	East Whiteland Twp.
5	SC	Koppers Co., Inc. (Charleston Plant)	Charleston.
5	VI	Tutu Wellfield	Tutu.
15	PA	Metropolitan Mirror and Glass Co., Inc	Frackville.
15	WI	Refuse Hideaway Landfill	Middleton.
20	FL	Helena Chemical Co. (Tampa Plant)	Tampa.
22	PA	Austin Avenue Radiation Site	Lansdowne.

Number of Sites Proposed for Listing 24.
1 Sites are placed in groups (Gr) corresponding to groups of 50 on the final NPL.

Table 2.--National Priorities List, Federal Facilities Section Proposed Rule #12
(By group)

NPL Gr [FN1]	State	Site name	City/county
2	TN	Memphis Defense Depot	Memphis.
5	CA	Concord Naval Weapons Station	Concord.
5	CA	Jet Propulsion Laboratory (NASA)	Pasadena.
5	GU	Anderson Air Force Base	Yigo.
5	VA	Naval Surface Warfare Center--Dahlgren	Dahlgren.
5	VA	Naval Weapons Station--Yorktown	Yorktown.

Number of Sites Proposed for Listing: 6.
1 Sites are placed in groups (Gr) corresponding to groups of 50 on the final NPL.

Authority: 42 U.S.C. 9601-9657; 33 U.S.C. 1321(c)(2); E.O. 11735, 38 FR 21243, E.O. 12580, 52 FR 2923.

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